

EAST CENTRAL AND EASTERN EUROPE IN THE MIDDLE AGES, 450-1450

# The Long Sixth Century in Eastern Europe



Florin Curta



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BRILL

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# East Central and Eastern Europe in the Middle Ages, 450–1450

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# The Long Sixth Century in Eastern Europe

*By*

Florin Curta



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# Abbreviations

AAC	Acta Archaeologica Carpathica
AAASH	Acta Archaeologica Academiae Scientiarum Hungaricae
AB	Archaeologia Bulgarica
AD	Archaiologikon Deltion
ADIU	Arkheologiia i davnii istoriia Ukrainy
ADSV	Antichnaia drevnost' i srednie veka
AE	Archaeologiai Értesítő
AEMA	Archivum Eurasiae Medii Aevi
AEMT	To Archaiologiko ergo ste Makedonia kai Thrake
AGNBFR	Anzeiger des Germanischen Nationalmuseums und Berichte aus dem Forschungsinstitut für Realienkunde
AIPZ	Arkheologiia i istoriia Pskova i Pskovskoi zemli
AL	Archaeologia Lituana
ALLU	Arkheologichnyi litopys Livoberezhnoi Ukrainy
AM	Arheologia Moldovei
AMIAP	Anuarul Muzeului de istorie și arheologie Prahova. Studii și comunicări
AMN	Acta Musei Napocensis
AOASH	Acta Orientalia Academiae Scientiarum Hungaricae
AOAW	Anzeiger der österreichischen Akademie der Wissenschaften
AOR	Arkheologicheski otkritiia i razkopki
AP	Archaeologica Pragensia
APol	Archeologia Polski
APU	Arkheologichni pam'iatky URSR
AR	Archeologické rozhledy
ARA	Annual Review of Anthropology
ArchB	Archaeologia Baltica
ArchPol	Archaeologia Polona
ArkV	Arkheologicheskie vesti
ASGE	Arkheologicheskii sbornik Gosudarstvennogo Ermitazha
AT	Antiquité tardive
AV	Arheološki vestnik
AVE	Arheoloogilised välitööd Eestis
BBAME	A Béri Balogh Adám Múzeum Évkönyve
BF	Byzantinische Forschungen
BMGS	Byzantine and Modern Greek Studies
BMIM	București. Materiale de istorie și muzeografie

BMJT	Buletinul Muzeului Județean Teleorman
BRGK	Bericht der römisch-germanischen Kommission
BZ	Byzantinische Zeitschrift
CA	Cahiers archéologiques
CAB	Cercetări arheologice în București
CAH	Communicationes Archaeologicae Hungariae
CCARB	Corso di cultura sull'arte ravennate e bizantina
DENMER	Dolgozatok az Erdélyi Nemzeti Múzeum Érem- és Régiségtárából
DOP	Dumbarton Oaks Papers
DS	Đerdapske sveske
EA	Eurasia Antiqua
EAA	Eesti arheoloogia ajakiri
EAZ	Ethnographisch-archäologische Zeitschrift
EB	Etudes Balkaniques
EN	Ephemeris Napocensis
ENSV	Eesti NSV Teaduste Akadeemia Toimetised. Ühiskonnateaduste seeria
FA	Folia Archaeologica
FAP	Fontes Archaeologici Posnanienses
FPP	Folia Praehistorica Posnaniensia
GSAD	Glasnik Srpskog arheološkog društva
GZMBH	Glasnik zemaljskog muzeja Bosne i Hercegovine u Sarajevu
HA	Histria Archaeologica
HAM	Hortus Artium Medievalium
HAZ	Histarychna-arkhealagichny Zbornik
HC	Historický časopis
IAI	Izvestiia na Arkheologicheskii Institut
IIAK	Izvestiia imperatorskoi arkheologicheskoi kommissii
INIM	Izvestiia na Nacionalniia Istoricheski Muzei
JAME	Jósa András Múzeum Évkönyve
JAR	Journal of Archaeological Research
JAS	Journal of Archaeological Science
JLA	Journal of Late Antiquity
JOB	Jahrbuch der österreichischen Byzantinistik
JPME	Janus Pannonius Múzeum Évkönyve
KraeZ	Kraevedcheskie zapiski
KS	Khersonesskii sbornik
KSDPI	Kratkie soobshcheniia o dokladakh i polevykh issledovaniiax Instituta istorii material'noi kul'tury AN SSSR
KSIA	Kratkie soobshcheniia Instituta Arkheologii AN SSSR

KSIIA	Kratkie soobshcheniia Instituta Arkheologii AN Rossii
KSIAU	Kratkie soobshcheniia Instituta Arkheologii AN USSR
LA	Lietuvos archeologija
LTSR	Lietuvos TSR mokslų Akademijos darbai. Serija A
MA	Memoria Antiquitatis
MAA	Macedoniae Acta Archaeologica
MAIASK	Materialy po arkheologii i istorii antichnogo i srednevekovnogo Kryma
MAIET	Materialy po arkheologii, istorii i etnografii Tavrii
MANH	Materiały Archeologiczne Nowej Huty
MArch	Materiały Archeologiczne
MCA	Materiale și cercetări arheologice
MDAI	Mitteilungen des Deutschen Archäologischen Instituts. Athenische Abteilung
MFME	Móra Ferenc Múzeum Evkönyve
MFMESA	Móra Ferenc Múzeum Evkönyve. Studia Archaeologica
ML	Múzeumi levelek
MM	Múzeumi mőtárgyvédelem
NK	Numizmatikai Közlöny
NNZIA	Novgorod i novgorodskaia zemlia. Istoriia i arkheologiia
PA	Památky Archeologické
PAAH	Praktika tes en Athenais Archaiologikes Hetaireias
PArch	Przegląd Archeologiczny
PBA	Prinosi kãm bălgarskata arkheologiia
PPIK	Problemi na prabălgarskata istoriia i kultura
PV	Povolzhskaia arkheologiia
RA	Rossiiskaia arkheologiia
RB	Revista Bistriței
REA	Research in Economic Anthropology
RoB	Rocznik Białostocki
RVM	Rad Vojvodanskih Muzeja
SA	Sovetskaia arkheologiia
SAA	Studia antiqua et archaeologica
SArch	Sprawozdania Archeologiczne
SlavAnt	Slavia Antiqua
SlovArch	Slovenská Archeológia
SBS	Studies in Byzantine Sigillography
SCIV	Studii și cercetări de istorie veche
SCIVA	Studii și cercetări de istorie veche și arheologie
SK	Setumaa kogumik

SLP	Starozhytnosti livoberezhnogo Podniprov'ia
SMK	Somogyi Múzeumok Közleményei
SMP	Studia mediaevalia Pragensia
SN	Slovenská Numizmatika
SP	Starohrvatska prosvjeta
SS	Sugdeiskii sbornik
SSBP	Studia Slavica et Balcanica Petropolitana
TAS	Tverskoi Arkheologicheskii Sbornik
T&M	Travaux et mémoires du Centre de recherches d'histoire et civilisation byzantines
VAU	Voprosy arkheologii Urala
VMMK	Vészpremi Megyei Muzeumok Közleményei
VV	Vizantiiskii vremennik
WA	Wiadomości Archeologiczne
WMBH	Wissenschaftliche Mitteilungen aus Bosnien und Herzegowina
WMME	A Wosinsky Mór Múzeum Evkönyve
WN	Wiadomości Numizmatyczne
ZAS	Zinātniskās atskaites sesijas materiāli par arheologu un etnogrāfu pētījumu rezultātiem
ZfA	Zeitschrift für Archäologie
ZM	Zalai Múzeum
ZRVI	Zbornik radova Vizantološkog Instituta

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# Introduction

There has recently been a great deal of scholarly attention on Eastern Europe. Historians of the modern era have turned the region into a *vagina nationum*: the greatest mass migration in history and even the “making of the free world” are directly related to Eastern Europe.<sup>1</sup> Historians of the Middle Ages writing in English have discovered that East Central Europe was a region of transfer, a contact zone.<sup>2</sup> A number of guides and companions are now available for those interested in research in the medieval history of the region or of its several constituent parts.<sup>3</sup> There is a greater preoccupation with including Eastern Europe into the history of the Continent, if not of Eurasia. Moreover, there is now a book series entirely dedicated to the history of Eastern Europe in the Middle Ages.<sup>4</sup> In spite of occasional qualms, therefore, these are exciting times for the study of medieval Eastern Europe.<sup>5</sup>

Missing from this promising picture is any comparable interest in Late Antiquity and the early Middle Ages. The debates about the transition from Antiquity to the Middle Ages have not so far incorporated the eastern and southeastern parts of the European continent. There is no room for Eastern Europe either in the Pirenne thesis or in any of its many reiterations. Despite the recent publication of books and chapter-length studies dedicated to the Balkan Peninsula and the adjacent regions beyond the rivers Danube and Sava, no attempt has been made to reach synthesis at a macro-scale, and no effort to compare and contrast the situation in Southeastern Europe with other parts of the Mediterranean world between 400 and 700.<sup>6</sup> Historians studying Eastern

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1 Zahra (2016). For *vagina nationum*, see Jordanes, *Getica* 25, 60.

2 Nagy/Schmieder/Vadas (2019), 3. For East Central Europe as a region of transfer from Byzantium, see Curta (2015). For an excellent study of kinship networks, see Raffensperger (2018).

3 Tornow (2005); Curta (2006c); Clewing/Schmitt (2011); Berend/Urbańczyk/Wiszewski (2013); Lübke/Hardt (2017); Brüggemann et al. (2018); Curta (2019); Mitthof/Schmitt/Schreiner (2019). Moreover, there is now an online bibliography of the history and archaeology of Eastern Europe between 500 and 1250, for which see <https://brill.com/view/db/bhae> (visit of August 27, 2020).

4 “East Central and Eastern Europe in the Middle Ages, 450–1450,” for which see <https://brill.com/view/serial/ECEE> (visit of August 27, 2020). Eastern Europe figures prominently in the publication list of “ARC—Beyond Medieval Europe,” for which see <https://www.aup.nl/en/series/arc-beyond-medieval-europe> (visit of August 27, 2020).

5 For qualms, see Berend (2016).

6 Wolff (2000); (Sanders (2004); Novak (2007); Sodini (2007); Tejral (2012); Aladzhev (2016); Sarantis (2016); Gándilá (2018a); Pohl (2018); Ivanišević/Bugarški (2019); Vida (2019). See also Kazanski (2013); Husár/Ivanič/Hetényi (2015); Liubichev/Myzgin (2020).



Europe struggle with periodization when attempting to match the order of events in Western Europe: when do the Middle Ages begin (and end)?

To some, the withdrawal of the Roman armies in the early 7th century provides a convenient marker, but many scholars prefer to begin with the coming of the barbarians, especially the Slavs, ca. 500.<sup>7</sup> With no event to fall in place conveniently like a curtain at the end of Antiquity, some historians have chosen AD 568, the year in which the Avars defeated the Gepids and the Lombard migrated to Italy, as the “dawn of the Dark Ages.” This, the argument goes, put an end to the history of the Gepids and of all other “Germanic” polities in the Carpathian Basin. Gone was the traditional system of alliances on which the Roman policies towards barbarians have been based, as the Avar newcomers set relations with the Empire on a completely different footing. To some, the year 568 serves therefore as the East European equivalent of 476.<sup>8</sup>

As important as the emigration of the Lombards may be for the medieval history of Italy, the year 568 is not an ideal point at which to begin an investigation into the transition from Late Antiquity to the Middle Ages in East Central and Eastern Europe. For it is evident that despite defeat, the Gepids survived under Avar rule, while the establishment of the Avar qaganate initially had little impact on the neighboring regions. Moreover, while the political developments involving the Avars, especially their relations with the Empire, have been covered in written records, the transformations taking place at that same time inside the Carpathian Basin, as well as in the neighboring Balkans have already started in the pre-Avar period. To describe and explain those transformations, no attempt has been made to employ the conceptual tools applying to West European history. Nor has there been any attempt to test the model of the “transformation of the Roman world” on the eastern part of the European continent, not even on the Balkans, a region that is conspicuously absent from Chris Wickham’s book on Europe and the Mediterranean between Late Antiquity and the early Middle Ages.<sup>9</sup> In that book, Wickham selected four specific issues as crucial: the form of the state (with particular emphasis on fiscality), the aristocracy, the peasantry, and the networks of exchange. His arguments were cast within the broader debate between “continuists” and “catastrophists” in regard to the transformation of the Roman world. His

7 Curta (2013c). In both East Central and Southeastern Europe, the “arrival of the Slavs” marks the beginning of the Middle Ages to such an extent that the adjectives “Slavic” and “medieval” are used interchangeably; see Chybová (1998); Makushnykau (2002). In the archaeological jargon in use in Prague and Kiev, a hillfort is “Slavic” not because Slavs have built it or used to live in it, but because it can be dated with some degree of certainty to the Middle Ages.

8 Bóna (1976), 105; Braychevs’kyi (1994), 16; Pohl (2018), 62–68.

9 Wickham (2006), 5.

conclusion was that the transfer of resources from the empire to “feudalism” took place because of the rise of the aristocracy. In other words, the transition from Antiquity to the Middle Ages is a matter of social change dominated by aristocratic needs and aspirations.

This book is meant to test that model, but goes much farther. In doing so, it focuses on a vast area of the European continent situated between the lands of modern Russia beyond the Arctic Circle to the north and Greece to the south, and between the Czech lands to the west and the Ural Mountains to the east. Leaving aside the almost complete neglect of this considerable part (two thirds) of the European continent in the scholarly literature dealing with Late Antiquity and the early Middle Ages, such a vast span of territory offers great opportunities for comparison.<sup>10</sup> The chronological interval considered in this book covers a little less than two centuries (ca. 500 to ca. 680), which explains the title (“the *long* sixth century”). This interval has been chosen for a variety of reasons, the most important of which has to do with the transition from Late Antiquity to the Middle Ages. By the end of the 5th century, in the aftermath of the collapse of the Hunnic polity, the Roman power was restored in the northern Balkans, which again brought the frontier of the Empire on the river Danube. The last century of Roman power in the Peninsula thus opened, and with it, a number of transformations that mark this area as different from all others around the Mediterranean that have been in the focus of Chris Wickham’s *Framing the Early Middle Ages*. Moreover, after the withdrawal of the Roman troops and administration from the peninsula (with the exception of the coastal regions), the Balkans experienced a demographic collapse, with large tracts of land left without any inhabitants.<sup>11</sup> The late antique cities and forts were abandoned and the population moved elsewhere, either as refugees into the coastal areas still under Roman control, or as prisoners of war within the Avar qaganate. No newcomers appear to have taken their places. There was no “Slavic tide” covering the Balkans after ca. 620. This situation in the Balkan Peninsula is therefore radically different from that of the other two peninsulas in southern Europe (Italian and Iberian), but not unlike the situation in Britain at the beginning of the 5th century. However, while in Britain both the population and the political developments have stabilized by 700, in the Balkans, the arrival of the Bulgars ca. 680 marked a new period of turmoil. Discontinuity

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10 There are currently 21 countries in Eastern Europe, with 20 official languages—a good measure of the region’s bewildering diversity.

11 Curta (2013c). See also Pletn’ov (2011); Crow (2014); Dzino (2017); Gjorgjievski (2020).

is therefore a key phenomenon for the understanding of the early medieval developments in the central and northern parts of the peninsula.<sup>12</sup>

This is also true for the opposite end of the vast area under consideration in this book, but a century earlier. During the 6th century, a very large part of East Central Europe, particularly northeastern Germany and Poland, were largely depopulated. Around 700, however, the first signs of new settlements appear, which have been associated with the migration of the Slavs from the south and southeast.<sup>13</sup> While the population vacuum in the northern part of Central Europe has largely been discussed in relation to the migration to the British Isles, in East Central Europe, the last century considered in this book (ca. 580 to ca. 680) is regarded as a key period for the establishment of the economic and social structures believed to mark the beginning of the Middle Ages. Farther to the east, the beginning and ending dates of the interval considered in this book are equally significant from a historical point of view. The last phase of the cemeteries with lavishly furnished graves in the Riazan'-Oka region to the southeast from present-day Moscow is dated to the second half of the 6th and the first half of the 7th century, while that of the equally rich cemeteries in the Perm region of the Ural mountains (the so-called Nevolino culture) begins around 500. The settlements of both the Vanvzdino culture in the northeastern parts of Eastern Europe (the present-day Komi Republic) and of the Imen'kovo culture in the Middle Volga region flourished during the "long sixth century." By 700, the political landscape of Eastern Europe has been radically modified in terms of the establishment of three powerful, similar states—the Avar qaganate in Central Europe, early medieval Bulgaria in the Balkans, and Khazaria in the steppe lands north of the Black and Caspian seas.<sup>14</sup> To ca. 680 can also be dated the earliest emporia established on the southern and southeastern shores of the Baltic Sea (e.g., Grobiņa in present-day Latvia).<sup>15</sup> Less than a century later, the Scandinavians responsible for the establishment of that type of settlement engaged the entire eastern part of the Continent into an enormous commercial network linking the markets in the Muslim world in the south to northern Europe.<sup>16</sup>

From an economic and social point of view, the "long sixth century" is therefore a crucial period in the history of Eastern Europe. However, the evidence pertaining to that history is primarily archaeological, as beyond the Balkans

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12 Jurković (1997); Madgearu (1997); Goldstein (2005); Špehar (2015).

13 Brather (2011); Messal/Rogalski (2012); Biermann (2016).

14 Ziemann (2007); Dudek (2016); Pohl (2018).

15 See also Bogucki (2006); Žulkus/Bertašius (2009). See also Mägi (2019).

16 Callmer (1990); Androshchuk (2013); Leont'ev/Nosov (2017).

and the neighboring territories to the north of the river Danube, much of Eastern Europe was not on the radar of the written sources pertaining to the 6th and 7th centuries. As a consequence, there have been no attempt to write an economic and social history of this region of the continent, since few historians inclined to do so could keep up with the rapidly accumulating evidence, and equally challenging interpretations of the archaeological material. Taking up that task, for the first time, this book is based on an in-depth analysis of the archaeological data combined with a critical approach to the written sources. In an effort to write “thick descriptions” of the variety and ingenuity of human creativity, I was inspired by the idea of seeking out the details of the way in which “people, in historically specific contexts, used, manipulated and confronted both texts and objects.”<sup>17</sup>

## 1 Written Sources

Literary sources produced in Eastern Europe are rare, but precious. The *Miracles of St. Demetrius*, a collection of homilies offered as a hymn of thanksgiving to God for His gift to the city, offers precious insights into the life of Thessalonica between ca. 580 and ca. 680. The first 15 miracles which the saint performed for the benefit of his city and its inhabitants are central to as many sermons written by Archbishop John of Thessalonica during the first decade of Heraclius’ reign (610–620). Six other miracles form Book II of the *Miracles*, which was written by an unknown author at some point during the last two decades of the 7th century. In addition to the coverage of several attacks on the city by Avars and Slavs, the *Miracles* offer glimpses into the changes that took place during the 6th and 7th century in one of the most important cities in the Empire. In that respect, and despite its preoccupation with miracles and miraculous deeds, the collection is invaluable for its information on the food supplies for Thessalonica during peacetime, as well as under siege; for the city’s harbor and its trade connections with the outside world; and for the

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17 Moreland (2003), 97. According to Moreland (2010), 57, any attempt to understand the Middle Ages “must use the full range of evidence that exists from that past. This evidence must be situated within a theoretical framework which allows the humanity of the past to shine through and which does not smother that past with a reified present.” In writing this book, I took this exhortation at heart, for what prompted my research were questions about a model—“the transformation of the Roman world”—which has as much to do with Late Antiquity as with the European Union in the late 20th century. For similar observations associated with the value of archaeology for writing history, see Fazioli (2017), 24–25.

social, political and administrative structures in the 7th century.<sup>18</sup> No other source for the Balkans and the neighboring regions to the north was written in the region, but the author of a military treatise known as the *Strategikon* was most likely an experienced officer who had undoubtedly participated in the campaigns that Emperor Maurice launched in the 590s against the Avars and the Sclavenes. He had first-hand knowledge of Avar tactics and of Slavic settlements, warfare, and society. Long attributed to a certain Maurice because of the mention of that name in three manuscripts dated to the first half of the 11th century, the *Strategikon* was most likely written at some point during the last ten years of the reign of Maurice (592–602) by one of his namesakes.<sup>19</sup>

The sources written in Greek outside the region occasionally mention people, places, or events, but rarely provide prolonged discussion. The most notable exception is *Wars*, one of the most important works that Procopius of Caesarea finished writing in 551. Although he rarely mentions his sources, Procopius was well informed on military events on many fronts, including the Balkans and the lands beyond the rivers Danube and Sava, to the north. However, except the regions in the immediate vicinity of Constantinople, he hardly knew the Balkan area other than from maps. Procopius' views of the barbarians—Lombards, Herules, Gepids, Sclavenes, Antes, Utigurs, and Cutrigurs—is a function of his general concept of God's empire surrounded by "allies." He espoused a mixture of scorn and learned curiosity for the territories beyond the borders of the Empire, and often employed ancient tropes for their description and antiquated names for the peoples inhabiting them during his lifetime. His astutely veiled criticism of Justinian and his policies makes it difficult sometimes to decide what to make of the spin he put on some events, or how to interpret some of his stories about barbarians.<sup>20</sup> Despite the seemingly abundant information, the fact is that the picture of economic and social developments is all too often partial or incomplete. Specific details are left unmentioned, apparently on purpose; episodes are modeled after scenes of the neo-Attic comedy or descriptions of judicial torture; and geography is adapted to the polemical needs of the author.<sup>21</sup>

Writing his *History* in the 560s, Agathias of Myrina obtained information about affairs north of the Lower Danube from military reports probably

18 Ivanova (1995); Iliadi (2003).

19 Förster (1877); Kuchma (1991); Gómez (2018), pp. 49–58. Petr Shuvalov's attempt to assign to different authors or editors various hypothetical phases of the text has not convinced anyone; see See Shuvalov (2002); Shuvalov (2005); Shuvalov (2011). See also the critical remarks of Rance (2017).

20 Ivanov (1984); Goldstein (1986); Kaldellis (2004); Rózycki (2017); Sarantis (2018).

21 Ivanov (1991), 231–32; Revanoglou (2005).

originating in the neighboring province of Scythia Minor.<sup>22</sup> More information about the “Huns” in the steppe lands around the Kerch Strait, which are based on Roman reports from Bosphorus, appears in the chronicle of John Malalas written, perhaps in Constantinople, a few years after Agathias’ *History*.<sup>23</sup> Of Constantinopolitan, either archival or oral origin is also the information provided by Menander the Guardsman and John of Ephesus on Avars and Slavs.<sup>24</sup> By contrast, Theophylact Simocatta’s coverage of events in the Lower Danube region during the last decade of the 6th and the first years of the 7th century is based on a campaign diary written by a participant in Emperor Maurice’s campaigns against Avars and Slavs, which explains the relatively large number of similarities with the recommendations of the *Strategikon*.<sup>25</sup>

A handful of 6th century imperial edicts provide useful nuggets of information on the economic and social situation in the Balkans, while a passage in John Lydus’ *On Powers* contains a brief description of the new administrative unit of the *quaestura exercitus*. Snippets of information about the situation in Istria, the steppe lands north of the Black Sea or the (north)western border of the Avar qaganate appear in sources written in Latin, such as Cassiodorus’ *Variae*, Jordanes’ *Getica*, and the so-called Chronicle of Fredegar.<sup>26</sup>

There are not sufficient sources for 6th and 7th centuries in order to reconstruct a complete political map of the time. It is possible to infer something from the existing sources only for political developments taking place either within the Balkan provinces of the Empire, or within a relatively short distance from its northern frontier. The following summary of the political events is simply meant to provide a background for the discussion of economic and social developments in the following chapters.<sup>27</sup>

## 2 Synopsis of Political History

Barbarian raids were the most prominent feature of 6th-century imperial politics in the Balkans. There is hardly any year within the first half of that century without a mention of raids by people whom early Byzantine authors, writing in the tradition of classical historiography, regarded as barbarians, without

22 Levinskaia/Tokhtas’ev (1991), 292.

23 Scott (1990). For Malalas’ sources of information, see Jeffreys (1990).

24 Yannopoulos (1990–1993); Levinskaia/Tokhtas’ev (1991); Constantinov (2001).

25 Haussig (1953), 296; Olajos (1988), 132 and 136; Kotłowska (2017).

26 Schütz (1992); Doležal (2014).

27 For a more detailed description of the political developments, complete with the most recent bibliography, see Curta (2019), 31–77.

much concern for accurate or objective ethnographic description. For example, during the first decades of the century, most raids were attributed to the “Huns,” a generic term that historians such as Comes Marcellinus, Jordanes, and Procopius used for horsemen from the steppe lands. At times, however, Bulgars (first mentioned in 480) and Cutrigurs are also mentioned, even along with the Huns, first allied with the Romans, then against them. Before 540, most raids targeted the eastern Balkans, especially Thrace and Moesia Inferior, an indication that they must have originated in the northwestern region of the Black Sea, not far from the line of the Lower Danube. Marauding expeditions were the work of one or several chieftains working together, such as those intercepted, defeated and killed in 539 after devastating Scythia Minor and Moesia Inferior. Despite all efforts, often surprisingly successful, directed towards intercepting and crushing marauding parties, “Hunnish” horsemen were at the same time recruited for Justinian’s wars in Italy, most likely because of their extraordinary mobility. It was indeed mobility that enabled other Hunnic marauders of 539 to reach the western Balkans and even the outskirts of Constantinople. It was in fact in response to such marauding activities that Justinian began his project of fortifying the Balkans and the Danube frontier on a scale without any precedent.<sup>28</sup> It is remarkable in that respect that there is no mutiny of Roman troops in the political history of the Balkans between Vitalian’s rebellion against Emperor Anastasius (513) and Phocas’s revolt against Maurice (602).<sup>29</sup>

In the Carpathian Basin, the imperial government chose a different strategy. Ever since the Gepid occupation of Sirmium during the Gothic war in Italy, the Gepids had become the second most important problem in the northern Balkans, after the “Huns,” with whom they formed an alliance in 535 in order to raid Moesia. During the Gothic war, the Gepids were allied with the Franks and constantly threatened the Roman line of defense in the northern Balkans. They were led by petty kings who ruled over most of the eastern part of the Carpathian Basin. Some of them, however, ruled from Sirmium, and others may have been their subordinates. Shortly before 500, Thrapstila was “king” of Sirmium, followed at his death by his son, Thrasaric. Cunimund, who ruled between 560 and 567, also resided in Sirmium, together with the Arian bishop

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28 Georgantzis (2011); Sarantis (2016), 49 and 51. For the mobility of the steppe horsemen, see Curta (2016), 75–79. For Justinian’s political responses to raids from across the Danube, see Ermolova (1999); Talevski (2015).

29 Madgearu (2001), 9–13; Patoura (2002); Ruscu (2008); Olster (1993). Politicking in the 6th- and early 7th-century Balkans was done especially by churchmen. See Pietri (1984), 45, 47–48, and 51–52; Blaudeau (2004); Wolińska (2007); Kunčar (2011).

of the Gepids.<sup>30</sup> In the mid-6th century, the Gepids were in conflict with their western neighbors, the Lombards. The Lombards had moved into the Middle Danube region from the north at some point during the early 6th century. Much like their Gepid counterparts, the Lombard kings maintained relations with distant potentates. Wacho, the king who ruled in the 520s and 530s, had close ties to the Merovingian rulers in Reims. His eldest daughter, Walderada, became the wife of Theudebert's son, Theudebald (547–555). Auduin, the Lombard king who ruled from 547/548 to 560/565, married Rodelinda, the daughter of last Thuringian king.<sup>31</sup>

Annoyed by Gepid depredations and by the impossibility of dislodging the Gepid king from Sirmium, Justinian agreed to give the Lombards the annual subsidies until then paid to the Gepids. In exchange, the Lombards became a permanent threat both to Sirmium and to the neighboring Gepid settlements. The Gepids were defeated by an allied Lombard-Roman force, and then again, in 551 or 552, by Lombards alone.<sup>32</sup> During the Lombard-Gepid conflict, a “no man's land” functioned as a political and military frontier region, which only political refugees could occasionally cross. For example, shortly after the Lombards and the Gepids agreed to a truce in 549, a candidate to the Lombard throne named Hildigis fled to the Gepids, followed by a multi-ethnic retinue, which he later took with him to Italy, where he joined the army of the Ostrogothic king Totila.<sup>33</sup> By that time, however, the greatest danger for the Roman system of defense in the Balkans did not come either from Gepid or from Lombard renegades.

In 545, a great throng of Slavenes crossed the river Danube, plundered the adjoining country and enslaved a large number of Romans. Judging by the testimony of Procopius of Caesarea, those Slavenes lived on, and not too far from the left bank of the Danube. Their raids, particularly in the early 550s, when the Slavenes reached as far south as Thessalonica and Dyrrachium (now Durrës, in Albania), were devastating. However, no Slavic raids are mentioned between 551 and 578, which suggests that Justinian's program of fortification in the Balkans, which must have come into being by the mid-6th century, was quite effective. When resuming in the 570s, the raids of the Slavenes involved much larger numbers of warriors, often under the leadership of just one chief, such as a certain Ardagastus, who led a raid in 585 that went as far as the outskirts

30 Diculescu (1923); Nagy (1999); Kiss (2015), 124–28. For Gepid Christianity, see Margit Nagy et al. (2000), 185.

31 Christou (1991), 59 and 62.

32 Christou (1991), 84, 91 and 95; Pohl (1996); Pohl (1997), 90; Bystrický (2017). See also Strzelczyk (2014), 7–59.

33 Bystrický (2017), 36–37.



of Constantinople. Another 5,000 Slavene warriors stormed the walls of Thessalonica in the early 580s.<sup>34</sup> Only the campaigns that Emperor Maurice launched in 592 into the Slavene territories north of the river Danube eventually put a stop on the devastations perpetrated by the Slavene warriors in the Balkans.<sup>35</sup> Slavic raiding activity resumed during Heraclius' reign, but the first indications of Slavic settlement in the hinterland of Thessalonica cannot be dated before 670.<sup>36</sup>

The Slavic raids of the late 6th century were often associated, at least in the minds of the Byzantine authors, with Avar attacks on key points of Justinian's system of defense. The Avars first appeared in the steppe north of the Caucasus Mountains, whence they sent an embassy to Emperor Justinian in 558. They quickly reduced to submission all the peoples of the steppe lands and then made a surprise attack on the Franks. Allied with Alboin, the king of the Lombards, they defeated the Gepids, and forced their former allies to emigrate to Italy.<sup>37</sup> From the Carpathian Basin, the Avars constantly raided the Balkan provinces, as far as Constantinople and Greece, managed to capture some of the key fortifications of the Roman system of defense, and extorted enormous amounts of imperial gold nominally paid as stipends. In 578, in order to win favor with the new emperor Tiberius II, the qagan of the Avars named Baian responded to the emperor's request for military assistance in his attempt to curb Slavic raids into the Balkans. No less than 60,000 horsemen are said to have been transported on Roman ships down the river Danube, from the Iron Gates to Scythia Minor, where they crossed the river into Slavene territory, which they laid waste. One year later, however, Baian began the three-year siege of Sirmium (which fell in 582), and the annual stipends paid to the Avars increased steadily from 80,000 to 150,000 gold coins over a period of 30 years. During the 580s and 590s, as the imperial armies were engaged in war on other fronts, the troops remaining in the Balkans were no match for the Avars. Singidunum (now Belgrade, Serbia) was twice taken and plundered, first in 584, when the army of the qagan moved swiftly across the Balkans from northern Serbia to the Black Sea coast. A year later, the Avars sacked a number of forts along the Danube frontier from Bononia (now Vidin, Bulgaria) to Tropaeum Traiani (now Adamclisi, Romania). The war continued in 586, when the Avars inflicted a number of demoralizing defeats on the imperial armies. An army said to have been of 100,000 Slavenes and other barbarians obeying the

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34 Teodor (2002); Teodor (2003); Olajos (2008).

35 Whitby (1988); Ivanov (2013); Delgado (2016).

36 Panov (2012).

37 Göckenjan (1993).

orders of the qagan appeared under the walls of Thessalonica on September 22, 586, but could not take the city under the protection of St. Demetrius.<sup>38</sup> When, in 592, the Roman defenses around the passes across the eastern Stara Planina range of mountains were left unmanned, the Avars invaded the Black Sea coast region and in only five days reached Drizipera (now Büyükkarıştıran near Lüleburgaz, in Turkey). Near Heraclea, they encountered the Roman army, which they attacked by night, and the remaining Roman forces locked themselves up inside the walls of Tzurullon (Çorlu, Turkey), only a dozen miles away from the Long Walls defending the capital city of the Empire.<sup>39</sup>

However, beginning with the mid-590s, the Romans went on offensive. Until Maurice's fall in 602, with some interruptions, Roman armies incessantly waged war in the territories north of the Danube River, sometimes against the Slavs, other times against the Avars. Among several generals, Priscus distinguished himself through a very aggressive approach. In 595, his troops crossed the Danube in the Iron Gates sector, and two years later crossed again and defeated a much superior Avar force in a series of encounters, killing almost the entire Avar army and the qagan's four sons at its command. When, in 601, the Avars were desperately attempting to recuperate their control of the Iron Gates region, the commander in chief was not the qagan, but a general named Apsich. He organized a quick campaign into the Lower Danube region, but large numbers of his troops defected to the Romans, an indication of the precarious situation in which the power of the qagan was in the aftermath of Priscus' successful campaigns.

For a long time, historians have associated the rebellion that broke out in 602 against Maurice among the troops on the Danube frontier under the command of a centurion named Phocas with the crumbling of the Roman defense in the Balkans and a general invasion of the peninsula by Slavs and Avars.<sup>40</sup> In reality, the Roman troops were still waging war successfully both on the Avars and on the Slavs when Emperor Maurice's order to his army to pass the winter in Slavene territory sparked the mutiny that would eventually bring Phocas to the imperial throne. Moreover, after overthrowing Maurice in 602, the army returned to the Danube front and continued to wage war against Slavs and Avars. No evidence exists either of Avar or of Slavic raids during the reign of Phocas, but marauding expeditions restarted during the first years of Heraclius' reign (610–641). By 620, occupation on most, if not all forts in the northern and central Balkans completely ceased, as the emperor withdrew all troops from

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38 Iatrou (2009).

39 Hurbanić (2015), 391–97.

40 Some still do: Custurea/Talmaçhi (2015).

the Balkans to meet the dangers on the eastern frontier. Taking advantage of the vacuum of power thus created, the Slavs, together with the Avars attacked Thessalonica again. Although the city resisted, in an attempt to appease the Avars, Heraclius raised the stipends to 200,000 gold coins and gave his own son as hostage.<sup>41</sup> The Avars, however, put Constantinople under siege in 626, in cooperation with the Persian armies on the other side of the Straits. The attack that the Slavs under Avar command launched on their canoes in the Golden Horn waters met the superior forces of the Byzantine fleet. The military failure grew quickly from debacle into disaster.<sup>42</sup> Conflicts between Avars and Sclavenes seem to have resulted from the failed siege, and the subsequent decades witnessed some of the worst political and, possibly, social convulsions in the history of the Avar qaganate. In the early 630s, civil war broke inside the qaganate between an Avar and a Bulgar “party.” The exact reasons for the conflict are not known, but it must have been associated with the considerable blow to the prestige of the ruling qagan that was brought by his defeat under the walls of Constantinople. The serious crisis opened by the civil war led to the migration to Bavaria of 9,000 Bulgar families, no doubt supporters of the losing party. They were slaughtered at the order of the Frankish King Dagobert, and only 700 families managed to escape to a certain duke of the Wends named Walluc, who probably ruled in what is now Austrian Carinthia and northern Slovenia.<sup>43</sup> Other, more belligerent Wends—the preferred name for Slavs on the western fringes of the qaganate—had by then established a powerful polity farther to the north or northwest. Their leader was a Frankish merchant named Samo, who ruled over the Wends for 35 years, and managed to defeat King Dagobert himself.<sup>44</sup>

The troubles at the center of the Avar power reverberated also in the East European steppe lands. A Bulgar lord named Kubrat rose against the Avars, established a powerful polity on both sides of the Sea of Azov, and allied himself with Emperor Heraclius.<sup>45</sup> Shortly after his death, that polity was rapidly conquered by the Khazars, who began building their own empire in the steppe lands. A group of Bulgars from those lands meanwhile migrated to the Lower Danube region, ca. 670. From there, the Bulgars began raiding those parts of the eastern Balkans that were still under Byzantine control. Initially, because of the concomitant attacks of the Arabs who besieged Constantinople between

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41 Hurbanič (2007).

42 Hurbanič (2016) and Hurbanič (2019).

43 Nikolov (2013); Mingazov (2017).

44 Polek (2006); Kardaras (2010–2011).

45 Stepanov (1995); Ziemann (2010); Galkina (2011).

674 and 678, Emperor Constantine IV tried to ensure good relations with the new barbarians at the Empire's northern frontier. However, shortly after his victory over the Arabs, he organized an expedition against the Bulgars, during which the Byzantine fleet blocked any passage across the Danube from north to south. The campaign went awry when the emperor decided to return to Mesembria (now Nesebăr, Bulgaria) together with his retinue and a part of the fleet. A rumor spread that the emperor was fleeing, and in the debacle, the Bulgars led by Asparukh crossed the Danube and reached the Black Sea coast near Varna. Following their victory of 680/1, they remained in the newly conquered lands (Dobrudja and what is now northeastern Bulgaria), subdued the local Slavic populations and began building a new polity, early medieval Bulgaria.<sup>46</sup>

### 3 Archaeological Sources and the Problems of Their Interpretation

Much more abundant than the textual evidence for the history of Eastern Europe as a whole is that from material sources. As in Chersonesus, archaeological excavations in Athens, Corinth, and Salona began in the 19th century, but research specifically directed towards Late Antiquity cannot be dated before the 1920s and the 1930s.<sup>47</sup> Initially, the focus was on basilicas and fortifications, but an early interest in economic issues and social structures was already apparent in the Soviet excavations in the Crimea. In Bulgaria, such concerns became apparent in the 1970s and 1980s primarily in relation to military sites on the right bank of the Danube River.<sup>48</sup> The timing of such concerns is not accidental.

In most parts of Eastern Europe, the rise of (early) medieval archaeology coincides with, and was ultimately caused by the imposition of the Communist regimes under Soviet aegis, if not control. As a consequence, archaeology was

46 Ziemann (2007), 161–79. The existence of the pre-Bulgar Slavic populations in northeastern Bulgaria has been recently contested; see Komatarova-Balinova (2016).

47 The excavations of the American School of Classical Studies in Corinth began in 1896, but late antique and early medieval finds were not recorded before 1920. The archaeological exploration of the Agora of Athens began in the 19th century with the Greek Archaeological Society, but the first late antique finds came to light during the School's excavations that started in 1931. Ejnar Dyggve's excavations in Salona began in 1922; see Dyggve (1951). For the history of the archaeological research in Chersonesus, see Iashaeva et al (2011), 43–54. See also Terry/Eaves (2001); Duval/Jeremić/Popović (2010).

48 Böttger (1974); Iurukova (1976); Henning (1986), 100–12. It is important to note that, of all categories of archaeological material, the early interest in economic issues privileged amphorae and coins. See also Patoura (1983).

organized along the lines of the Soviet school of “material culture history” and received a degree of institutional support that it had never experienced before. Considerable long-term investments with no parallels anywhere else in Europe made possible large-scale explorations of several key sites, some of which resulted in total excavation, following the principles first championed by the Soviet school of archaeology.<sup>49</sup> The earliest horizontal excavations of medieval settlements were published in Soviet Russia in the 1930s.<sup>50</sup> By directing the attention of archaeologists to the lives of ordinary people, the Marxist paradigm encouraged the development of settlement archaeology (as opposed to the excavation of cemeteries which had until then been the almost exclusive focus of research). The result of that shift in emphasis was the large-scale excavation of 6th- to 7th-century villages such as Popina (Bulgaria), Dunaújváros (Hungary), and Březno (Czechoslovakia).<sup>51</sup> Similarly large-scale excavations, some of which continued after 1989, have brought to light some of the largest settlements known from 6th- to 7th-century Europe.<sup>52</sup> The analysis of finds from those excavations formed the basis for the first attempts to write economic and social history (almost exclusively) on the basis of archaeological data.<sup>53</sup> The growth in the 1960s and 1970s of cemetery archaeology, especially in Hungary, Poland and the Soviet Union, led to a quick increase in the volume of data, to such an extent that entire chronological gaps in the knowledge of the early Middle Ages have been virtually eliminated by 1990 primarily because of archaeological research. Some of those cemeteries are very large (e.g., Zamárdi, in Hungary, with over 2,000 burials), others have several barrows (e.g., Baliulai, in Lithuania, with 16 burial mounds), some with multiple burials each (e.g., elongated barrow 6 in Rõsna-Saare, in Estonia, with seven separate cremations).<sup>54</sup>

For the last 50 years or so, archaeology has been instrumental in “writing history” for entire periods or areas that are otherwise poorly covered in the written sources, if at all. For example, only archaeological excavations have shed light on the social and economic organization of those parts of East Central Europe (Moravia, Lower Austria and western Hungary), which was

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49 Klein (2012); Lozny (2016). The impact of the Soviet school of archaeology in satellite countries after 1945 is currently a matter of debate. See Stamatii (2015); Neustupný (2016).

50 Artamonov (1935).

51 Vázharova (1956); Pleinerová (1959); Bóna (1972).

52 Baran (1986); Gojda/Kuna (1986); Mitrea (2000).

53 Kurnatowska (1972); Dostál (1976); Kurnatowska (1978); Beranová (1980); Beranová (1984); Beranová (1986); Herrmann (1986).

54 Bárdos (2000), 76; Kliaugaitė/Kurila (2012); Aun (1980), 369.

occupied in the 6th century by the Lombards.<sup>55</sup> Nothing is known from the written sources about the northwestern part of present-day Russia during the 6th century, but there are several cemetery and settlement sites dated to that period and much can be said about social organization and economic structures based just on that kind of evidence.<sup>56</sup> Only archaeological excavations and, more recently, numismatics have provided information about the sudden involvement of the taiga region of Eastern Europe in long-distance trade networks across Eurasia.<sup>57</sup>

Archaeological sources, however, are not without their own problems. In the absence of wooden remains (of the appropriate species of trees, and with a sufficient number of rings for dendrochronological analysis), dating is often a serious problem. The recent surge in the use of radiocarbon analysis has only partially alleviated that problem, for standard deviations cover an interval of 60 years for any calibrated dating results. Bayesian statistics may be used to obtain explicit estimates, but for that one needs multiple results from a large number of samples.<sup>58</sup> By contrast, dendrochronology has a great impact on research, because of the ability to assign precise dates (down to a particular season or even month of the year) to timber structures. This has changed radically the understanding both of settlement chronology and of the impact of climate change.<sup>59</sup>

That many more ordinary settlements than high-status sites have been excavated is undoubtedly because of the primarily Marxist orientation of the earlier decades of archaeological research, especially the 1950s and the 1960s. On the other hand, the prevailing understanding of archaeology as a historical discipline favored the cultural-historical approach, which led to an obsessive preoccupation with ethnicity and the rapid politicization of the archaeological research. For a long time, almost every archaeological site in the European part of the Soviet Union was attributed to the Slavs, a stance revived in Putin's Russia.<sup>60</sup> Conversely, 6th- to 7th-century settlements in southern and eastern Romania, though excavated in large numbers and, in some cases,

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55 Vida (2008); Quast (2009).

56 Mikhailova (2015a); Islanova (2017).

57 Ivanov (1998); Goldina/Nikitin (1997). Another area of significant scholarly growth over the last few decades is study of coins and of their economic importance. See Militký (2009); Mikhailov (2012); Ivanišević/Popović (2017).

58 Stadler et al. (2003); Fóthi et al. (2009); Rzeszotarska-Nowakiewicz (2013).

59 Krąpiec (1996); Krąpiec (1998); Pleinerová (2005); Dulnicz (2007).

60 Ligi (1993); Ligi (1994); Curta (2001b); Stamati (2019), 105–13. For the reactivation of the debate surrounding the presumed presence of the early Slavs in the Middle Volga region, see Matveeva (1981); Stashenkov (2006); Lifanov (2012); Zhikh (2014).

comprehensively, were never recognized as “Slavic,” because that would have contradicted the supposedly anti-Soviet stance of Nicolae Ceaușescu and his insistence that the early medieval migratory populations (especially the Slavs) were responsible for Romania’s lagging behind the West in the 20th century in matters of the general development of productive forces and civilization.<sup>61</sup> Many finds in Slovakia were wrongly dated (deliberately) to avoid their interpretation as evidence that the early Slavs came to that region together with the Avars, who were perceived as ancestors or just predecessors of modern Hungarians.<sup>62</sup>

While distancing itself from a cultural-historical approach and ethnic interpretations, this book is also steering away from evolutionary ecology, with its emphasis on how humans cope with the environment, and a preoccupation with the impact of climate change on economic and social developments. Instead, the emphasis is on practice and on human agency.<sup>63</sup> The way of living in a landscape is therefore conceptualized as a result of human problem solving, a form of land use or a subsistence strategy. On the other hand, the centrality of production and consumption makes it possible to focus on the household or the community level in an attempt to understand the emergence of material wealth-based inequality.<sup>64</sup> From that perspective, technology has social significance. The emphasis on micro-, instead of macro-level is a good antidote against the identification, description, and classification of any particular (static) social organization of a period or a place. Social complexity is treated as transformation, with the recognition of the local contingencies and the historical nature of the process. The meaning of material culture is contingent and contextually dependent, but material culture does not necessarily reflect social reality. Indeed, it was often used to mask or to obscure that reality. If, like a text, material culture requires interpretation, one needs to start from the premise that material culture is a social, not an individual phenomenon. The primary importance of material culture, therefore, is not its practical function, but its symbolic value as part of the social construction of reality. In that respect, material culture is subject to multiple transformations in form and meaning content; it forms a communicative medium in, for, and of social practice. The approach adopted in this book may therefore be described as “processual-plus.”<sup>65</sup>

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61 Curta (1994), 269–70.

62 Chropovský (1964); Fusek (1992); Čaplovič (2000); Fusek (2008). See also Krekovič (2004).

63 Bourdieu (1972); Giddens (1984).

64 Kahn (2013), 251–52.

65 Hegmon (2003), 217.

#### 4 Book Structure and Scope

The book has four unequal parts dedicated to the historiography of the problem and the geography of the region, the “Roman orbit,” the world (far) beyond it, and the specific trends of the economic and social developments in Eastern Europe. Chapter 1 offers a critical review of Chris Wickham’s model of the “transformation of the Roman world,” with a special emphasis on the “peasant mode of production” and the way in which the model accounts for parts of Balkan Peninsula now in Greece. Chapter 2 is an introduction to the historiography of medieval Eastern Europe and to the geography of that part of the Continent. The emphasis on landscape modification is meant to highlight the minimal impact of the former on the economic and social developments of the period under consideration in this book. By contrast, the discussion of proxy data pertaining to climate change and of their interpretation serves as a caveat against environmental determinism. Research in this particular field is still in its infancy, and conclusions drawn at a local or even regional level cannot apply to the whole of Eastern Europe. Different parts of the Continent experienced the climate change taking place in the late 5th or early 6th century in different ways. No one-to-one correlation can so far be established between climate change and the economic and social shifts taking place in Eastern and East Central Europe during the “long sixth century.”

The following seven chapters (3 to 9) are dedicated to those shifts inside the Balkan Peninsula, Crimea, and the adjacent regions along the Middle and Lower Danube and in the steppe lands north of the Black Sea. The main goal of those chapters is to highlight changes taking place within territories directly ruled by Romans (the Balkan Crimean peninsulas), or occupied by barbarian clients, allies or enemies of the Empire (the Carpathian Basin, the lands north of the Lower Danube, and the steppe lands north of the Black Sea). Two regions are covered in pairs of separate chapters—the Balkan Peninsula and the Carpathian Basin. In the case of the former, chapter 3 deals with the last century of Roman power (500 to ca. 620), while chapter 4 is dedicated to the situation in the Balkans following the withdrawal of the Roman army and administration (620 to ca. 680). In the case of the Carpathian Basin, chapter 6 deals with the Roman clients (Gepids and Lombards), while chapter 7 is dedicated to the first century of Avar power (570 to ca. 680). Each chapter of the section entitled “The Roman orbit” uses five themes—property, subsistence economy, crafts, forms of exchange, and social change—to explore regional diversity and to highlight specific developments. The same set of themes are also used as guidelines for the next six chapters (10 to 15) of the section entitled “Far away from the Empire.” Each one of them focuses on a region of



East Central and Eastern Europe, from Poland and the Baltic lands to the west to the taiga belt next to the Ural Mountains to the east, running through the forest-steppe and forest belts, as well as through the central parts of present-day Russia. As all those regions were outside the radar of the written sources in the 6th and 7th centuries, there is a much greater emphasis on the archaeological data and their interpretation in the light of the five themes employed for the section dedicated to the Roman orbit. The main purpose of the 13 chapters (3 to 15) in the middle of the book is therefore to provide a basis for comparison.

The five themes guiding the analysis of the historical and archaeological information are the focus of the last section of the book entitled “Specific trends.” Each chapter in this section is dedicated to one of the themes and is based on a comparative analysis of the data presented in the previous chapter within the theoretical framework of economic anthropology. Concepts are introduced, such as swidden cultivation, embedded production, attached specialists, wealth finance, and third-type transfers, in order to explain the specific developments and the contrasts identified between regions. Various strands of evidence are then brought together in the conclusion, which addresses the issue of whether the model of the “transformation of the Roman world” can apply to Eastern Europe.

The resulting, overall picture is different from both the standard Marxist interpretation, which was the rule in most countries in Eastern Europe until 1989, and the neo-Marxist model of analysis offered by Chris Wickham for Europe and the Mediterranean between ca. 400 and ca. 800. Traditional Marxists saw a transition from a slave-owning to a feudal mode of production in those territories that had belonged to the Roman Empire, or the imposition of the so-called “tributary” or Asian mode of production outside the formerly Roman lands. In both, the collapse of the Roman Empire—as a state and an instrument of exploitation—was a crucial argument. Chris Wickham, on the other hand, put a great emphasis on the continuing power of the state, when describing the “Mediterranean world-system” fueled not by commercial enterprise, but by fiscality and the enormous demands of commodities such as wine, grain and oil generated by Rome and Constantinople. Outside the Empire, in such remote places as Denmark and Ireland, the change was in fact a transformation of small-scale “tribal” states into larger kingdoms. Crucial for my decision to move away from both models is the incontrovertible evidence of discontinuity, as well as the survival of urban settlements on the southern rim of the region (the northern coast of the Black Sea, and the coastal areas of the Balkan Peninsula). Exactly how the urban aristocracy was able to survive in those coastal centers, and even to maintain a certain degree of social distinction manifested in such lofty titles as *proteuontes* and *archontes* is illustrated

by the second book of the *Miracles of St. Demetrius*. The extraordinary richness of finds from the cemetery excavated in the early 20th century on the Hospital Street in Kerch' is the archaeological correlate of those social claims to prominence.<sup>66</sup>

While there is considerable evidence for rural communities in Eastern Europe around 600, there is also evidence of powerful aristocracies outside and far away from the cities surviving in the coastal regions. The rich burials in the Ufa region of present-day Bashkortostan, the burial mounds in eastern Lithuania, as well as the formidably furnished, warrior graves in Sambia and in Avar-age Hungary are a clear testimony that in Eastern Europe, much like in the rest of the Continent during the 6th and 7th centuries, considerable social differences were maintained in ranked societies. At the same time, a number of archaeological phenomena in Eastern Europe that could hastily be linked to “peasant-mode” societies have no equivalent in the rest of the continent. There is simply nothing in the whole of Europe like the 7th-century, agricultural settlement in Roztoky, near Prague, with its over 300 sunken-floored buildings.<sup>67</sup> Nor is there any analogue for the later settlements of specialized production—blacksmithing in Zamárdi, non-ferrous metallurgy in Iur'evskaia Gorka, or pottery production in Kantserka.<sup>68</sup> The “peasant-mode” societies of Eastern Europe, if that is what they were, seem to have been much more complex than Wickham's model would suggest.

Such features are in contrast, on the other hand, with the evidence of communal burial in the so-called long barrows of northwestern Russia and southeastern Estonia, or the communal centers of craft production and probably feasting, such a Hački and Szeligi in Poland, or Zymne in Ukraine.<sup>69</sup> In Eastern Europe, there are multiple degrees of shade between the “worlds of the villa on the one hand and the castle on the other.”<sup>70</sup> There is also plenty of archaeological evidence for the understanding of the role of exchange networks in the period of transition from Late Antiquity to the early Middle Ages. Long-distance exchanges were not necessarily commercial around AD 600, although the persistence of commercial exchanges even beyond that date, and well into the 7th century, cannot be denied for the Black Sea area.<sup>71</sup> Bow fibulae, weapons, and stirrups may have traveled across Eastern Europe by means of non-commercial exchanges, which imply an interpretation of the social

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66 Shkorpil (1913).

67 Kuna et al. (2013).

68 Islanova (1997); Volodarets'-Urbanovych (2011); Gallina (2018).

69 Dulinicz 2011; Mikhailova (2014b).

70 Wickham (2006), 516.

71 Golofast (2003); Alekseenko (2008).

level of development of the communities engaged in such exchanges, which is different from that favored for the analysis of the distribution of *exotica* in other parts of Europe.<sup>72</sup> This book will emphasize the great role that wealth finance played not only in the circulation of ideas and ornamental patterns, but also in establishing networks of alliances and communication.

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<sup>72</sup> Vida (2000); Nowakowski (2008); Quast (2008); Curta (2012).

## The Transition from Antiquity to the Middle Ages: The Current Model

Much has been written in recent years about the continuity between Antiquity and the Middle Ages. Few are those who would now challenge the model of the “transformation of the Roman world,” which was established in the 1990s through a five-year research program generously funded by the European Science Foundation.<sup>1</sup> The results were published in fourteen volumes of a special book series edited by such prominent scholars as Walter Pohl, Chris Wickham, Ian Wood, Neil Christie, Richard Hodges, Evangelos Chrysos, and Miquel Barceló.<sup>2</sup> None of those books, however, had a greater impact on the current state of research on the transition from Late Antiquity to the early Middle Ages than Chris Wickham’s large monograph, *Framing the Early Middle Ages*.<sup>3</sup> The book is regarded as the most serious attempt to demonstrate “how post-imperial developments of different regions of the Empire had more to do with their specific pre-imperial history than with their fate in Late Antiquity.”<sup>4</sup> Wickham used the “archaeological evidence to establish a richer, more complex, and nuanced *non-catastrophist* reading of the evolution of the early Middle Ages out of the dissolution of the late Roman empire” (original emphasis).<sup>5</sup> Because of its emphasis on modes of production, *Framing the Early Middle Ages* offers a way to understand the transformation in economic and social terms.

The key variable in the model presented in Wickham’s book is tax.<sup>6</sup> According to Wickham, the Late Roman Empire created a very powerful taxation mechanism to feed the state’s ever-increasing expenses. Moreover, the

1 For dissenting voices, see, however, Ward-Perkins (2006) and Heather (2009).

2 The series was published between 1997 and 2004 by Brill under the title “Transformation of the Roman World” (see <https://brill.com/view/serial/TRW>, visit of August 19, 2020). The phrase may have been inspired by White (1966). The concept has been recently developed and somewhat modified in Mathisen/Shanzer (2011).

3 Wickham (2006).

4 Rummel (2013), 389, citing Wickham (2006), 831.

5 Escalona (2011), 26 with n. 56; Banaji (2015), 9. Wickham (2006) is now regarded even as a good framework for the analysis of the domestic architecture in early medieval rural settlements of the Iberian Peninsula. See Tejerizo García (2014), 299 and 326.

6 Cossentino (2007), 123 with n. 28 calls the tax system “il maggiore pilastro concettuale” of Wickham (2006).

late Roman taxation system encouraged a relative rapid integration across a very large territory, and “bolstered the aristocracy through the sheer scale of political and economic integration that went” together with taxation.<sup>7</sup> However, after the collapse of imperial power in the West and the consolidation of new power structures in the post-Roman, “successor” kingdoms, direct taxation was gradually abandoned as a way for the state to obtain income. The disappearance of direct taxation, on the other hand, made it possible for income previously taxed by the state to be redirected into the hands of elites, whose status did not depend upon any relations with the state. Accompanying changes at economic, political and ideological levels gave rise to new political structures, which some historians refuse to call “states”, while others prefer to treat as a different *kind* of state. The latter group of scholars point out that such political structures were not based on taxation, since the indirect method had become sufficiently effective, with several social agents collecting surplus. To be sure, by the time *Framing the Early Middle Ages* was published, the process and its complexity had already been the subject of debate for some thirty years. At stake in that debate was the centrality of taxation between ca. 400 and ca. 800.<sup>8</sup>

However, Wickham shifted the emphasis to the *mode* of surplus collection, which he then treated as the principal indicator of socio-economic structures. In other words, the Roman system, which was based on taxation, was replaced by another, in which the rent predominated, with a gradual decline of the power of the state to collect surplus. The monetization of exchanges and the structure of demand in the Roman Empire have been direct consequences of the fiscal infrastructure and the demands of the state, particularly the army and the subsidies for the major cities.<sup>9</sup> But the shrinking network for the distribution of the *annona* and the loss of the tax assets led to a decline of trade and diminishing investments in urban structures.<sup>10</sup> Nonetheless, the decline of taxation had positive effects in the countryside, where it allowed for new investments from that part of the agrarian surplus, which the farmer had until

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7 Banaji (2007), 257; Díaz/Viso (2011), 8.

8 Díaz/Viso (2011), 9.

9 This characterization of the Roman monetary system did not go unchallenged. Haldon (2008), 340 notes that “the fiscal sector seems to be independent from an enormous amount of exchange activity using gold, a point that serves as a clear challenge to Wickham’s fiscally nuanced model.”

10 Wickham (2006), 62–64 and 708–10.

then used to pay taxes.<sup>11</sup> In other words, the axis of the later system was not the state anymore, but land ownership:

In an ideal-type tax-based state, where wealth is taken from (nearly) everyone, the fiscal system provides an independent basis for political power, separate from the goodwill of the aristocracy (for the army is paid directly from the public coffers), and complex bureaucracies handle the tax-collection. [... In] an ideal-type land-based (or rent-based) state [...], the bulk of the wealth of a ruler is derived not from the whole population, but only from the rent-paying inhabitants of the land he directly controls, and that wealth is the major support for all political aggregation. [...] All political reward is dominated by the “politics of the land”—cessions of land and its rents, to officials or other powerful aristocrats, in return for loyalty.<sup>12</sup>

Despite the use of the Weberian ideal type, this is in fact a model of Marxist inspiration, and one could hardly miss the allusion to the “feudal mode of production” contained in the description of the rent-based system and the “politics of the land.”<sup>13</sup> But *Framing the Early Middle Ages* is not just about the transition from a slave-based to a feudal mode of production. Wickham insists that with every new step towards the decline of taxation, elites became more vulnerable, and ultimately more regionalized—“aristocracies hung out to dry.”<sup>14</sup> In Western Europe, subsequent developments followed one of three possible paths. In Britain, a dramatic collapse in the 5th century led to the wholesale disappearance of the aristocracy, which re-emerged on a completely new basis in the 8th and 9th centuries. In the Frankish territories north of the river Loire, a powerful class of aristocrats is already visible in the 6th century. In Italy, the

11 As Cossentino (2007), 123 notes, the emphasis on taxation (and its decline) represents a characteristic feature of the so-called “Birmingham school” of (primarily Marxist) historiography, to which John Haldon also belongs. Like Wickham, Haldon believes that the “ruralisation” of the early Byzantine society led to dramatic transformations, particularly to the shift of the state’s fiscal concerns from cities to village communities, which became the main units of assessment by the later 7th century. See Haldon (2000), 229.

12 Wickham (2006), 58. Paolu Delogu, in Giardina/Cammarosano/Delogu (2006), 152, sees the contrast between an ideal-type tax-based state and a land- (or rent-based) state as “un’oscillazione fra il momento empirico e la pulsione sistematizzante.”

13 Wickham’s approach is denounced as Marxist by Gurevich (2008). Gurevich’s was the most vituperating critique of all. Gurevich (who died one year after the publication of the *Framing of the Middle Ages*) accused Wickham of turning Marx’s *Capital* “upside down” with his promotion of the “peasant mode of production.”

14 Banaji (2007), 257.

rapid loss of economic coherence in the 6th century was accompanied by the destruction of the Late Roman aristocracy both by war and by fragmentation.<sup>15</sup>

Beyond regional variation, however, slave plantations, peasant farming, and wage labor are all different ways of organizing labor power, in short, “modes of production” in a Marxist sense of that phrase.<sup>16</sup> To the classic Marxist trio (slave-based, feudal, and capitalist modes of production), Wickham adds a fourth element—the “peasant mode of production,” in which “landlords or the state do not take surplus in a systematic way.”<sup>17</sup> The “peasant mode of production” is based on the ideas of the Soviet agrarian economist Aleksandr V. Chayanov (1888–1937) concerning the organization of the peasant economy. Of particular significance for Wickham’s concept is Chayanov’s consumption-labour-balance principle, according to which peasants have no incentives to produce a surplus.<sup>18</sup> Like him, Wickham believes that peasants “do not work so hard.”<sup>19</sup> In other words, the “peasant mode of production” is a lull between the tax-driven slave-based mode of production and the rent-based, feudal mode of production. Unlike both of them, the peasant mode of production existed on a zero-growth level of historical development, which made it attractive to both post-Roman and non-Roman societies. The transition period was one in which the peasant mode of production operated as a social and economic equalizer between those regions that had, until then, been within the Empire, and those that had never been part of it. In fact, *Framing the Early Middle Ages* makes a very strong case for an expansion of the peasant mode of production through the early medieval period, as a direct consequence of the decline of taxation.

The weakening of the state empowered the peasantry, although it also created room for powerful aristocrats. Outside the empire, aristocrats rarely, if ever gained sufficient power to challenge seriously the economic foundations of the peasant mode of production. One version of a ranked, peasant-mode of society is that in which a ruler is not the owner of the land, but the leader of

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15 Banaji (2007), 259.

16 Wickham has long advocated the existence of the so-called tributary mode of production, which contradicts the logic of dialectic and historical materialism. See Wickham (1985) and Haldon (1993). Shaw (2008), 102 even believes that Wickham’s “commitment to the ‘tributary mode’” caused him to see a downturn of the system in the West.

17 Wickham (2006), 261 and 536–47. Feller (2013), 453 suggests that another source of inspiration for the “peasant mode of production” was Sahlins (1972), a key study in substantivist economic anthropology. Wickham (2006), 694–95 actually calls his position “substantivist” in contrast to the “market forces’ side” of the debate concerning the nature of exchange.

18 Chayanov (1918); see Graca (2008), 289. For a critique of Chayanov’s economic model, see Netting (1993), 295–319.

19 Wickham (2006), 537.

free men tied to him through mutual obligations and loyalty. “Free peasants in such tribal societies owe military service and tribute, but are economically autonomous, which forces rulers to ‘give back’ in the form of elaborate hospitality or feasting.”<sup>20</sup>

Despite the leveler of the peasant mode of production, both before and after the year 800 that mode of production was replaced by feudalism. The peasant mode of production and the feudal mode of production co-existed for a while in a vast patchwork of micro-regions reflecting the economic fragmentation of Western Europe.<sup>21</sup> The historical moment in which the peasant mode of production entirely lost ground to the dominant feudal mode is outside the chronological interval considered in the *Framing the Early Middle Ages*, which suggests that Chris Wickham sees the peasantry as the agent of historical change during the transition from Late Antiquity to the early Middle Ages. However, he also sees the aristocracy as the driving force behind the economic and social changes taking place during that period. According to him, it was aristocratic demand that eventually drove Europe and the Mediterranean into the feudal mode of production. Conversely, it was not only the decline of the state, but also the rise of regional aristocracies that made room for new forms of settlement. According to Wickham, in western Europe villages were invented in the early Middle Ages. Only the eastern, Greek-speaking parts of the Roman Empire had known village life in any identifiable sense before c.600.<sup>22</sup> By contrast, in Western Europe, villages came into being as a byproduct of the transition to a peasant mode of production.

The model advanced by Chris Wickham in *Framing the Early Middle Ages* has been widely accepted. One of the reasons for its success is that it provides a useful basis both for generalization, and for comparison. Wickham’s reliance on the archaeological data, particularly ceramics, gives his arguments a force and depth that make them appealing to both historians and archaeologists. In fact, because of this model, historians and archaeologists have finally found a common platform for dialogue. This is why Wickham’s model was especially

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20 Wickham (2006), 305.

21 As Banaji (2015), 145 notes, Wickham identifies the “microregionality of modes of production” by means of the ceramic evidence pointing to sharp differences in both scale and complexity of exchange networks.

22 According to Wickham (2006), 465, “what are now Bulgaria, Macedonia, and northern Greece appear to belong with the eastern world of villages in the 5th and 6th centuries.” See also the comments of Banaji (2007), 259. However, if such villages existed before 600, they must have quickly disappeared, because, as Decker (2016), 17 puts it, during the second half of the seventh century, entire regions of the Balkans were completely depopulated.



attractive, and triggered much scholarly discussion in Spain and Italy, two countries in which the field of medieval archaeology has long been divorced from historical studies.<sup>23</sup> Wickham's "peasant mode of production" is a fundamental premise for Alfonso Vigil-Escalera Guirado's work on 5th-century rural settlements in central Spain.<sup>24</sup> Building upon Wickham's ideas, Alexandra Chavarría has proposed that instead of the disappearance of late antique elites, historians and archaeologists need to turn their attention to the evidence of militarization of aristocracies. As a consequence, she advanced the idea that "castles" (in the sense of hillforts) in northern Italy, Slovenia, southern France, and northern Spain were built in the 5th century at the initiative of the state in collaboration (rather than in contrast) with the local aristocracies and, in some cases, with the Church.<sup>25</sup> The state, in other words, was still a formidable presence in the 5th century in all those regions. On the other hand, economic and cultural changes at the end of Late Antiquity took place within strong peasant communities, and could not therefore be attributed to elites alone. In the *Framing the Early Middle Ages*, northwestern Iberia is just another example of a "tribal society" operating under the peasant mode of production. New research has engaged creatively with Wickham's model to make sense of the archaeological evidence of social inequality and elites.<sup>26</sup> A few commentators have noticed that *Framing the Early Middle Ages* contains contradictory views on the relations between various modes of production. Wickham, for example, claims that the ancient (or tributary) mode of production, based on taxes, and the feudal mode of production (based on rent) are "sub-types of the same mode of production, in that both are based on agrarian surplus extracted, by force, if necessary, from the peasant majority."<sup>27</sup> Elsewhere in the *Framing of Early Medieval Europe*, the feudal mode of production appears as "the normal economic system of the ancient and medieval periods."<sup>28</sup> Moreover, Wickham also describes the post-Carolingian age as a return of feudal dominance.<sup>29</sup> Needless to say, if the feudal mode of production is a sub-type of another, then

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23 This is true even for those countries in the Mediterranean area that Wickham almost completely ignored, but in which historians and archaeologists have equally kept disciplinary boundaries between them; see Tente (2016), 35.

24 Vigil-Escalera Guirado (2015).

25 Chavarría-Arnau (2011), 123. Chavarría-Arnau (2013), 157 has also criticized the idea, ultimately derived from Wickham, that villages in Hispania could have come into being in Late Antiquity without the intervention of the central power.

26 Wickham (2006), 40–41 and 227–30; Quirós Castillo (2016), 12.

27 Wickham (2006), 60.

28 Wickham (2006), 535.

29 Wickham (2006), 270.

it cannot be at the same time the “normal” economic system of both Antiquity and the Middle Ages.<sup>30</sup>

Criticism of *Framing the Early Middle Ages* has typically focused on what Wickham neglected or chose to ignore: settlement patterns and the changes taking place in the agrarian landscape, as well as the ethnic connotations, particularly in reference to barbarians.<sup>31</sup> Wickham’s idea that the “domestic” pottery has no relevance for the study of economy has encouraged a number of fundamental studies aiming to prove the contrary.<sup>32</sup> Wickham’s reticence to deal with money is attributed to a particular view of the Roman monetary economy that prevailed in England in the 1970s and 1980s.<sup>33</sup> Some believe that, like John Haldon, Chris Wickham had been profoundly influenced by the work of Michael Hendy.<sup>34</sup> That, at least, was the source for the idea that the drastic transformations of the 7th century were the result of the considerable losses that the Empire suffered in terms of territory and wealth.<sup>35</sup> The numismatic evidence suggests more economic dynamism in the western provinces of the Byzantine Empire than in Asia Minor, but that contradicts Wickham’s model, because it implies that in the 7th century the state (at one of its weakest points in Byzantine history) did not have a key role in sustaining the level of monetary economy.<sup>36</sup> Wickham’s efforts to minimize the economic significance of slavery has also been exposed for ignoring the evidence of wide-spread use of slaves in the post-Roman West.<sup>37</sup> Both Paolo Delogu and Brent Shaw bemoan Wickham’s rejection of population dynamics as a possible explanation for the changes taking place during the transition from Late Antiquity to the early Middle Ages: the “whole subject of the historical demography of

30 Giardina/Cammarosano/Delogu (2006), 127. For a similar critique, see Banaji (2009), 71. For a parallel debate on the modes of production, see the contributions of John Haldon, Vicent García, Eduardo Manzano Moreno, and Manuel Acién Almansa in *Historia* 58, no. 3 (1998), 797–970. For other contradictions in Wickham’s *Framing*, see Graca (2008), 291–94.

31 Giardina/Cammarosano/Delogu (2006), 150–51.

32 Vigil-Escalera Guirado/Quirós Castillo (2014), 378 with n. 33. Conversely, Paolo Cammarosano, in Giardina/Cammarosano/Delogu (2006), 150 does not believe that any single category of the archaeological record, such as pottery, can be sufficient for gauging the complex economic developments of the past.

33 According to Banaji (2015), 9, Wickham’s is a “closed monetary circuit” model.

34 Cossentino (2007), 123.

35 Wickham (2006), 125; Hendy (1985), 620. By contrast, Haldon (2000), 240–41 uses Hendy (1985), 637–38 to argue that one could explain the transformations of the 7th century as a demonetization of the Byzantine economy in reference to the fiscal cycle and the redistribution of coin.

36 Cossentino (2007), 130.

37 Banaji (2015), 161.

Mediterranean lands in Antiquity cannot be swept entirely off stage and left undiscussed.”<sup>38</sup> Wickham curiously believes that the demographic contraction is not a cause, but a consequence of the changes taking place in the mode of production. The demographic decline resulted from the slowing down of the state and patron pressure on peasants, who now could use the increasing freedom and prosperity to work less, and have fewer children in order to enjoy life—an interpretation that owes as much to Chaianov’s consumption-labour-balance principle as it reflects the aspirations of the 21st-century middle class in Britain.<sup>39</sup> No scholar has so far pointed to Achilles’ heel in Wickham’s model: for all its Marxist inspiration, *Framing the Early Middle Ages* has very little to say about production. The substantivist stance ultimately encourages an image of the early Middle Ages as a world of exchange and consumption (such as feasting) almost completely divorced from production.<sup>40</sup>

John Haldon and Walter Pohl expressed regrets that *Framing the Early Middle Ages* did not deal with the Balkans, because Wickham’s idea that the peasantry had much to gain from the reduced burden of obligations would perfectly apply to the Slavs (so Pohl).<sup>41</sup> According to Haldon, the pattern of state involvement in re-structuring urban and defensive centers in the Balkans, which is already visible in the 5th century and continued through the 6th century and even the early 7th century, served as a model for similar, but later state-led changes in Asia Minor.<sup>42</sup> Most authors concerned with the transition from Late Antiquity

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38 Giardina/Cammarosano/Delogu (2006), 156–57; Shaw (2008), 94, who points out that the number of aristocrats in the Late Roman Empire was too small to be responsible for the level of demand “that Wickham needs to sustain the immense long-range transport of basic bulk commodities that he sees at the heart of the system.” Only very large numbers of individual consumers could have produced that level of demand.

39 A very similar argument appears in Haldon (2000), 249, who explains the absence of African imports (amphorae and Red Slip wares) in the interior of sixth-century Greece in terms of the “resistance to imports [that] may be found in a more or less autarkic and highly localized peasant economy, in which the market potential for imports was limited.”

40 Moreland (2000), 20: “even some accounts of early medieval economic processes written from an explicitly Marxist perspective, still ascribe the same determinacy to elite exchange”; see also Chavarría-Arnau (2011), 123. For the confusion between “modes of production” and “modes of exploitation,” see Stahl (1992), 58.

41 Haldon (2008), 331; Pohl (2011), 60. Meanwhile, the chapter dedicated to the (early) Slavs in the first volume of the *New Cambridge Medieval History*, covering the period from c. 500 to c. 700 [Kobyliński (2005)] lacks any discussion of economic or social issues.

42 Haldon (2000), 240; for a similar argument about fortified sites, see Dunn (1994). As a matter of fact, Haldon (2007) has nothing substantial on the Balkans. On the other hand, Haldon believes in an “almost complete absence of bronze coins from all excavated sites

to the early Middle Ages ignored the Balkans.<sup>43</sup> Peter Sarris has nothing to say about the region in his book on the economy and society of the 6th-century empire, which is primarily concerned with Egypt.<sup>44</sup> The same is true for Jairus Banaji and Michael Decker's books on agriculture in Late Antiquity.<sup>45</sup> Michael McCormick deliberately leaves out the entire region of Eastern Europe, which he calls the "Slavlands."<sup>46</sup> The tone for such attitudes has been set earlier by the Transformation of the Roman World program sponsored by the European Science Foundation. That program promised to deal with the evidence "from Central Europe ... much of it unknown or unconsidered in the West until recently". The lands east of the Elbe—McCormick's "Slavlands"—"needed to be placed in the reckoning."<sup>47</sup> Less than a decade before the extension of the European Union to Eastern Europe, such programmatic ideas were meant to instill hope. To this day, however, they remain an empty promise.

*Framing the Early Middle Ages* contains a few oblique references to the Balkans, the close examinations of which may explain Wickham's decision to leave the region out of his analysis. According to him, there were many villages in the central and northern Balkans during the 5th and 6th centuries, but recent studies have proved the contrary.<sup>48</sup> By contrast, according to Wickham, the southernmost part of the Balkans now within Greece "had a more 'western'

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in Asia Minor and the Balkans after the early 660s," an idea that contradicts the existing evidence, for which see Curta (2005a).

- 43 Zerbini (2013), 58: "The Balkans have for long remained—and, to a certain extent, remain so today—at the margins of the debate concerning Late Antiquity in general, and the late antique economy in particular."
- 44 Sarris (2006), 117 and 121 mentions Thrace and Greece, respectively, but only in relation to earlier, 4th- and 5th-century developments. Whitby (2000), 718 mentions "substantial mineral wealth" in the central Balkan region, but nothing else about economic or social issues.
- 45 There is nothing about the Balkans or the Crimea in Banaji (2007). Decker (2009) contains several references to Greece, but none about the agriculture in the region during the 6th century.
- 46 Davis/McCormick (2008), 7, where the "Slavlands" are one of the "vast and dynamic areas of Europe whose transformations owed and brought so much to early medieval civilization." McCormick (2001) mentions Bulgaria, Greece and the "Slavland" only in relation to 9th-century developments. McCormick (2003), p. 313 has doubts that Eastern Europe was "at the centre of European history."
- 47 Wood (1997), 219.
- 48 Curta (2001a); Dinchev (2002); Sanders (2004); Rashev/Dinchev/Borisov (2005). For the debate surrounding the 6th- and early 7th-century hillforts in the Balkans (whether fortified villages or not), and studies published after the *Framing the Early Middle Ages*, see chapter 3.

pattern, with villas and isolated farms.”<sup>49</sup> That must be the reason for which the only part of the Balkan Peninsula that gets any coverage in the *Framing the Early Middle Ages* is Greece. The Balkans appear in Wickham’s book as a term of comparison for western Europe. Indeed, “radical de-Romanization and tribalization” is how Wickham describes what happened in the 7th century in the Balkans, and those are also attributes of his description of post-Roman Britain.<sup>50</sup> Nonetheless, he declares that he has decided to leave the Slavic lands out, “both in the Roman empire (in the Balkans) and outside it,” because of his “linguistic weaknesses,” an oblique reference to the presumed abundance of specialized literature in languages other than English, French, German, or Italian.<sup>51</sup> In reality, Wickham’s attitude towards the Balkan region (and Eastern Europe as a whole) looks more like a curious mixture of lack of familiarity with the fundamental literature and a need to find a good “mirror” for comparison with developments in western Europe. To Wickham, Eastern Europe is not the other, but the outer Europe.<sup>52</sup> His decision to leave out Eastern Europe may in fact be responsible for an equally puzzling silence. To this day, the main thesis of Wickham’s book has not been cited by any historian or archaeologist from

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49 Wickham (2006), 466.

50 Wickham (2006), 338, where he cites Curta (2001), 311–34. The comparison between post-Roman Britain and Balkans is not original, but goes back to Ward-Perkins (2000), 362. Wickham (2009), 157 describes the material culture of the Anglo-Saxons as “far simpler than that found anywhere on the ex-Roman Continent outside the Balkans.” The Balkan region resembles Anglo-Saxon England in that “quite small-scale groups managed to take over a province more or less completely” and even change its language. However, Wickham’s Slavs are far more powerful than the Anglo-Saxons, a true agent of catastrophic change in the history of the Continent. Not only did the arrival of the Slavs in central Europe (which Wickham dates “in the mid and late 6th century”) block trade routes across central and eastern Europe “in a way that the Huns in the fifth century had never sought to do”; but the migration of the Slavs also “broke the unity of the continuity of the continent.” See Wickham (1998), 281. According to Pohl (2011), 60, the Slavic settlement in the Balkans put an end to the Roman forms of life [and also cites Curta (2001), a book that actually makes the opposite argument].

51 Wickham (2006), 5. That is a poor excuse, because the number of studies—monographs, articles in specialized periodicals, and chapters in collections of studies—that were published in English, German, French, and Italian by far exceeds the number of those studies written in any of the languages in use in the Balkan region. The same is true for countries in East Central and Eastern Europe. One and same author often published the same text in his or her own native tongue, and soon after that in English, German, French, or Italian. This was true even for pre-1989 publications. The undeclared goal of such publication tactics was to make conclusions accessible to scholars outside the region.

52 That is, in fact, the title of chapter 20 of Wickham (2009), 472–507, which deals also with Scandinavia, Wales, Ireland, and Spain.

the region, not even by those who reached similar conclusions on the basis of a very different research agenda.<sup>53</sup>

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53 E. g., Bileta (2011), 100–21. Ančić (2011), 243 with n. 53 cites Wickham's operational definition of the aristocracy, but only for its cautious approach, not for the conclusions drawn on the basis of its use. Budak (2017), 184 with n. 4 cites Wickham's book just as an example of how neglected Dalmatia and Croatia are in "overviews and synthesis of European history." Among scholars that study the late antique and early medieval history of the Balkans, but who live outside that region, only Curta (2013), 146 and Dzino (2014), 133 [as well as Dzino (2017), 157] have cited the book.

## Eastern Europe: Concepts, Geography, Climate History

When thinking of Eastern and Western Europe in opposition to each other, most historians have in mind the formal political and economic entities that came out of the Yalta and Potsdam agreements of 1945. However, as Larry Wolff has shown, the idea of “Eastern Europe” originated in the intellectual milieu of the Enlightenment: “The invention of Eastern Europe was a subtly self-promoting and sometimes overtly self-congratulatory event in intellectual history, whereby Western Europe also identified itself and affirmed its own precedence.”<sup>1</sup> In other words, the concept of Eastern Europe was created by West Europeans during the 18th century, as a “barbaric and exotic complement to their own civilized countries.”<sup>2</sup> That may definitely explain the late development of any interest in the history of the region, particularly that of the Middle Ages. Indeed, while the history of history writing in each one of the countries that emerged in the 20th century in Eastern Europe goes back to the Middle Ages, a concern with the history of the region as a whole did not develop before the 20th century.

Oskar Halecki (1891–1973), a Polish historian specializing in the history of late medieval Poland, was the first to address the issue of a specific chronology and history of Eastern Europe. In his paper presented in 1923 at the 5th International Congress of Historical Sciences in Brussels, Halecki understood “Eastern Europe” as the territory north of the Carpathian Mountains that had been included at any point in history into Poland. At the 6th International Congress, which took place in Oslo in 1928, another Polish historian of the Middle Ages, Kazimierz Tymieniecki (1887–1968), expanded the definition to include all lands in Europe to the east from the river Elbe, but without Scandinavia and the Balkans. At the 7th International Congress (Warsaw, 1933), a special section for the history of Eastern Europe was formed on the basis of the already existing Federation of Historical Societies of Eastern Europe, founded by another Polish historian, Marcei Handelsman (1882–1945) in 1927.<sup>3</sup> Jaroslav Bidlo (1868–1937), a professor at the Charles University in Prague,

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1 Wolff (1994), 360.

2 Berend/Urbańczyk/Wiszewski (2013), 8.

3 Kłoczowski (1995), 6–18.

insisted on the role of religion in the definition of boundaries. To him, the history of Eastern Europe had profound roots in Byzantium, and the knowledge of Byzantium was key to its understanding.

Byzantium was also a key component in the definition of Southeastern Europe. That phrase appeared only on the eve of the Congress of Berlin (1878), and was initially used by scholars interested in comparative linguistics, particularly in what is now known as the Balkan *Sprachbund*, the most famous example of language contact.<sup>4</sup> In Austria, the phrase was quickly adopted by both statesmen and diplomats to refer to the entire region between the Carpathian Mountains, the Dniester River, and the Aegean, Black, and Adriatic Seas—a region of vital importance for the expansion of the Austrian-Hungarian Empire around 1900. The first course of Southeast European history was in fact offered in 1912 at the University of Vienna by a Romanian, Ion Nistor (1876–1962), later to become a renowned historian of the Middle Ages. A few years later, in the aftermath of the Balkan Wars and the Treaty of Bucharest (1913), another Romanian historian, Nicolae Iorga (1871–1940), established the Institute of Southeast European Studies. Later, he also launched a periodical, *Revue historique du sud-est européen* (1922), and began to iron out the supposedly distinctive features of the region going back to the Byzantine rule over the entire Balkan Peninsula.<sup>5</sup>

The early decades of the 20th century also witnessed the emergence of another phrase: East Central Europe. Tomáš Garrigue Masaryk (1850–1937), the first president of Czechoslovakia, wrote of a “peculiar zone of small nations” between Germany and Russia, and later called that East Central Europe.<sup>6</sup> In 1935, Imre Lukinich (1880–1950), a professor of late medieval and early modern history at the University of Budapest, established the periodical *Archivum Europae Centro-Orientalis*. During World War II, only a few volumes were published, and in 1944, the periodical stopped. Meanwhile, Oskar Halecki began to employ Masaryk’s idea shortly after coming to the United States as a refugee from the region at that time occupied by the Nazis. Echoing Masaryk, he placed medieval East Central Europe between the Holy Roman-German Empire and Kievan Rus’. To him, East Central Europe stretched from Finland in the north to Greece in the south.<sup>7</sup> By excluding Russia from his notion of East Central

4 Drace-Francis (2003), 277. For the Balkan *Sprachbund*, see Mišeska-Tomić (2006).

5 Curta (2006c), 2–4.

6 Hayashi (2008). There are echoes of Masaryk in Hodža (1942), 3–8, who in the early 1940s was still writing of “these small nations of Central Europe,” a region “between Russia, Germany, and Italy.” However, Hodža traced the origin of Central Europe to the early 19th century, and not to the Middle Ages.

7 Halecki (1950), 125–41; Halecki (1952), 3–7.



Europe, Halecki may have reacted to the political divisions of the early Cold War period.<sup>8</sup> Since he did not pay any attention to the phrase Eastern Europe, and seemingly denied a European identity to Russia, the notion of East Central Europe implied that the Continent had a west and a center, but no east.<sup>9</sup> It is only recently that scholars have become aware that the demarcation of Eastern Europe as reading of history backwards in time is little more than an attempt to create historical justifications for modern divisions “in the same way that historical identity has been used for nation building.”<sup>10</sup>

In present-day Ukraine and Russia, “Southeastern Europe” does not refer to the Balkan Peninsula, but to the southeastern regions of the former Soviet Union.<sup>11</sup> Meanwhile, the notion of “East Central Europe” has no appeal among historians and archaeologists working on Late Antiquity, who prefer to employ the phrase “Central Europe,” even when referring to Hungary or Poland.<sup>12</sup> Historians and archaeologists dealing with Late Antiquity tend to equate Eastern Europe with Russia, while Russian scholars commonly write of Northeastern Europe or the northwestern part of Eastern Europe, two phrases rarely, if ever employed by scholars writing in English.<sup>13</sup> Such terminology implies an extension of Eastern Europe all the way to the Ural Mountains to the east, and the White Sea to the north.

In this book, the phrases *Eastern Europe*, *Southeastern Europe*, and *East Central Europe* are used in a primarily and purely geographic sense, and in no way as political divisions (Fig. 1). In this respect, the vast area of the European continent situated between the Czech lands to the west and the Ural Mountains to the east, and from beyond the Arctic Circle to Greece on a north-south axis may be best described as the land mass between 36 and 70 degrees north latitude, and from 12 to 60 degrees east longitude. If one divides that land mass arbitrarily into two slightly unequal slices, then East Central Europe is the western half, between 12 and 35 degrees east, and Eastern

8 Berend (2016), 11. The shadow of the Cold War still looms large over Jenő Szűcs's studies on the “three regions of Europe,” despite his attempts to establish a regional identity for East Central Europe [Szűcs (1983)]. On the other hand, not all historians writing in English at the beginning of the Cold War were eager to embrace Halecki's terminology. Francis Dvornik, who came to the United States shortly after Halecki, included Russia in his view of the European Middle Ages. See Curta (2005c), 2 and 21 with n. 6.

9 Okey (1992), 104.

10 Raffensperger (2014), 853.

11 Gorelik (2002); Volodarets'-Urbanovych/Skyba (2011).

12 Pohl (2003); Buko (2012); Odler (2012).

13 Noonan (1999); Podosinov (2000); Akhmedov/Furas'ev/Shchukin/Belocerkovskaia (2007); Polgár (2009); Mikhailova (2017). For Northeastern Europe and the northwestern region of Eastern Europe, see Savel'eva (1996); Islanova (2016).



FIGURE 1 Principal geographical features mentioned in the text: 1—Apuseni Mountains; 2—Black Sea; 3—Bohemian Forest; 4—Carpathian Mountains; 5—Central Russian Uplands; 6—Danube River; 7—Dinaric Alps; 8—Dnieper River; 9—Don River; 10—Mezen River; 11—Moravian Heights; 12—Niemen River; 13—Northern Dvina River; 14—Northern European Plain; 15—Pechora River; 16—Pindus Mountains; 17—Plain of Hungary; 18—Rhodope Mountains; 19—Stara Planina Mountains; 20—Sudeten Mountains; 21—Tisza River; 22—Ural Mountains; 23—Ural River; 24—Valdai Hills; 25—Vistula; 26—Volga; 27—Volga Heights; 28—Western Dvina River.

Europe is the eastern half, between 35 and 60 degrees east. The western half could then be subdivided latitudinally along the 45th degree north to distinguish Southeastern Europe located to the south from that parallel. The considerable land mass demarcated in such a manner represents two thirds of the entire Continent. Its vast extent is only matched by its incredible variety. The western part (both in East Central and in Southeastern Europe) has one of the most complicated mountain range systems in Europe, with the Carpathians forming a loop on the eastern side of the river Danube and sweeping in a

southeast direction towards that river's delta. The lands inside the semicircle of the mountains form the Carpathian Basin divided into three unequal parts by the rivers Danube and Tisza flowing on a north-south direction. Transylvania is the eastern part of the Carpathian Basin, separated from the Plain of Hungary by the Western Romanian Carpathians (Apuseni).

The landscape of Southeastern Europe is also defined orographically by four chains running radially from the center of the Balkan Peninsula—the Dinaric Alps to the northwest, the Pindus to the south, the Rhodope to the southeast and the Balkans (Stara Planina) to the east. The latter are separated from the southern Carpathians (also known as the Transylvanian Alps) by the fertile plain of the Lower Danube. Two lower ranges of mountains run in a northwestern direction from the westernmost end of the Carpathians—the Bohemian Forest and the Sudeten, with the Moravian Heights between them. From those mountains and the Carpathians to the south to the Baltic Sea to the north, East Central Europe consists of a vast lowland corridor—the North European Plain, which extends eastwards all the way to the Ural Mountains. Another lowland corridor extends on a west-east direction from the Danube to the Aral Sea, and beyond. Those were the steppe lands of Eastern Europe, located on the northern shores of the Black and Caspian Seas and divided by several major rivers, the most important of which are the Dnieper, the Don, the Volga, and the Ural. Some parts of this region (the so-called Caspian Depression) are below sea level, with marshlands and patches of semi-arid desert. The Central Russian Uplands and the Volga Heights are the only elevations of Eastern Europe, between the North European Plain and the steppe lands to the south. Because of them, several rivers flow through the North European Plain and into the neighboring seas. The most important rivers flowing to the north are the Vistula, the Niemen, the Western Dvina (emptying into the Baltic Sea), the Northern Dvina, the Mezen, and the Pechora (emptying into the White Sea).

The band-like arrangement of the geographic features in Eastern Europe, however, is rarely employed in historical works. Historians and archaeologists alike prefer to use biomes and ecotones, which have an equally band-like distribution: the steppe belt (the westernmost segment of the Great Steppe of Eurasia) is between 200 and 600 miles wide; the forest-steppe belt immediately to the north; and the forest belt, a very broad band of wooded area extending to the north all the way to Finland and the White Sea, into the taiga. There are only few lines of communication between those three belts, the most important of which is the Volga, the longest river of Europe, which springs in the Valdai Hills, on the northern edge of the Central Russian Uplands, and flows into the Caspian Sea through a very large delta (which was, nonetheless, much smaller in Antiquity and the Middle Ages than it is now). Because the Dnieper

and the Western Dvina also rise from the northern sector of the Central Russian Uplands, the three rivers played a major role as axes of communication, trade, and political centralization in the early Middle Ages.

Very little of this landscape of Eastern Europe changed in the 6th and 7th centuries. The only exceptions are the coastal regions, especially the river deltas, particularly those of the Volga, the Danube, and the Niemen, which are the largest in Europe. While the Volga Delta grew very large only in recent times, deposition in the Niemen delta began in the 10th century from Rusnė (southern Lithuania), where the river splits into two branches, the Atmata and the Skirvytė.<sup>14</sup> The entire area of the Niemen delta now within Lithuania was therefore under water during Late Antiquity and the early Middle Ages. Although there is clear evidence of a human occupation of the spit closing up the Curonian Lagoon to the west, most sites dated between the 5th and the 7th century appear farther inland, at a considerable distance from the modern shoreline.<sup>15</sup> Equally significant is the geological history of the Danube Delta. The present-day aspect of its southern part is the result of an expansion along the Dunavăț branch, which is most likely the Peuce arm known from ancient sources. That expansion began shortly before AD 600 as a result of the combined effect of neotectonics (sinking processes) and wave reworking. The delta lobe thus formed as downdrift barrier-marsh plain of the older Sf. Gheorghe lobe to the north covered a vast area in Dobrudja now under the waters of the lakes Razim and Golovița.<sup>16</sup> The development of the Dunavăț deltaic lobe seems to have been accompanied by shallower waters in the offshore zone, particularly near the early Byzantine city of Histria (now on the western shore of Lake Sinoe). This may have hindered boat circulation on the north- and eastward navigation routes, and some have even suggested that the city abandonment after ca. 620 was caused by the growth of the southern lobe of the Danube Delta.<sup>17</sup> Others, however, maintain that late antique Histria suffered from gradual flooding caused by the steady subsidence of the deltaic area (in the so-called “Histria Depression”).<sup>18</sup>

14 Bitinas/Damušytė/Stančikaitė/Aleksa (2002), 385. The delta is therefore a medieval phenomenon.

15 Bliujienė (2013), 117 with fig. 45.

16 Vespremeanu-Stroe et al. (2017), 55–56 and 50 fig. 9E.

17 Vespremeanu-Stroe et al. (2013), 252. Much like in the case of the Niemen delta, the barrier spits now separating from the sea both the southern part of the Danube Delta, and the three lakes (Razim, Golovița, and Sinoe) long pre-date the expansion of the Dunavăț lobe. By contrast, Lake Babadag, to the west from Lake Razim, came into being at a much later date. Judging from late medieval and modern maps of the Black Sea shore, Lake Babadag appeared in the late eighteenth century. See Valette et al. (2013), 348.

18 Romanescu (2013), 241–42 and 241 fig. 10.

Floods are also associated with landscape changes in the interior of Eastern Europe. During the 5th and 6th centuries, the region saw forest restoration and increasing precipitation, both of which are connected to floods recorded in river channel sediments containing subfossil oak. Sedimentation in the Upper Dniester region in western Ukraine (near the Polish and Slovak borders) continued into the seventh century. The oxbow lake deposits identified in the valley of the river Strviash (a right-hand tributary of the Dniester) are dated by means of dendrochronology to the 6th century and represent flood accumulation. The region of the Upper Dniester valley would not experience floods of such magnitude before the late 10th century.<sup>19</sup> Alluvial deposits have also been identified further to the west, in the upper valley of the Vistula River near Cracow. The dendrochronological analysis of the subfossil oak trapped in those deposits indicates flood accumulation between ca. 425 and ca. 600. No surprise, therefore, that all settlement sites known from that period are aligned on the edge of the loess terrace, just above the flood plain.<sup>20</sup> Greater precipitation levels have also been identified for the late 5th and 6th century farther to the northwest, in the region of the lower Warta and Oder rivers of central-western Poland. Unlike the situation in the upper Vistula and upper Dniester valleys, the lower Warta and Oder region seems to have been completely depopulated during the sixth century.<sup>21</sup> It is tempting to see those observations as confirming the existence of a so-called “early medieval cold period,” otherwise known as the “Vandal Minimum.”<sup>22</sup> Some in fact regard the climate change taking place at the beginning of the 6th century, or shortly before that, as a Central European phenomenon.<sup>23</sup>

However, the precise dating made possible by dendrochronology indicates (repeated) episodes of flooding, not a continuous trend. Conversely, the results of palaeoecological and geoarchaeological studies of sedimentary sequences from lakes and bogs cannot be dated with the same precision and are therefore

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19 Gębica et al. (2013), 212 and 214.

20 Dobrzańska/Kalicki/Szmoniewski (2009), 159 and 164; 162 fig. 6B; 166 fig. 7; 167 fig. 8B. The dendrochronological analysis also indicates that most trees were very large, some of them over 200-years old. This has been rightly interpreted as mirroring a long-term expansion of the forest cover.

21 Volkmann (2014), 139. For the subsequent period, see Volkmann (2013).

22 For floods as a typical feature of the “early medieval cold period”, see Benvenuti et al. (2006). For the “Vandal Minimum,” see Bryson (1994), 122. Büntgen et al. (2016) and Preiser-Kapeller (2018), 314 go as far as to postulate a “Late Antique Little Ice Age” between ca. 530 and 660.

23 Madyda-Legutko/Poleski/ Krąpiec (2005), 317 believe that the increasing humidity after the mid-5th century was a phenomenon taking place within the whole territory between eastern Poland and western Germany.

not suited for direct comparison with the evidence from alluvial deposits. Despite such caveats, paleoclimatological studies carried out at higher degrees of longitude have clearly led to very different conclusions. Peat records from the Verevainu Mire near the Keava bog (central Estonia) show a progressive clearance of the landscape. Pollen evidence for arable farming in the area increased through the 5th and 6th centuries, along with the evidence of microscopic charcoal possibly indicating slash-and-burn agriculture. The evidence from Verevainu Mire strongly suggests deforestation and destruction of vegetation, as well as an increasing intensity of agricultural practices, all made possible by a warmer climate.<sup>24</sup> This is now backed by observations based on peat records from the Usviatskii Mokh bog, in the valley of the Western Dvina near Tver (northwestern Russia). During the 6th century, the average annual temperature in that area rose considerably, while the level of precipitation dropped. This coincided with a settlement boom in the valley of the Western Dvina, in itself a clear indication of demographic growth.<sup>25</sup> Higher annual temperatures may also be surmised on the basis of a study of pollen and charcoal deposits in peat layers of Lake Kis-Balaton (located next to the western end of Lake Balaton, in Hungary). During the 5th and 6th centuries, the region had extensive vineyards, which completely disappeared after the mid-7th century.<sup>26</sup> The rainier days of the late 5th and 6th centuries were associated with milder and warmer temperatures in the steppe belt of Eastern Europe as well, as indicated the sea level rise observed in the Caspian Sea.<sup>27</sup>

That the climate change taking place in the late 5th or early 6th century did not affect the whole of Eastern Europe in the same way should come as no surprise. After all, even for a considerably smaller area, such as the Italian

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24 Heinsalu/Veski (2010), 87. According to Poska/Saarse/Veski (2004), 47, the intensification of the agricultural activities coincides in time with the introduction of rye as a separate crop. In that respect, the evidence from Estonia pertaining to the 6th century is in direct contradiction to the idea of a climate catastrophe taking place in 536/7, for which see Tvauri (2014).

25 Oleinikov (2007), 166 and 182; 166 fig. 1. While temperatures continued to rise, the level of precipitations also rose dramatically after ca. 600. See also Furas'ev (2003), 221–22; Ereemeev/Dziuba (2010), 431–32.

26 Hipp (2009), 29. According to Sümegi et al. (2011), 562–63, the rise of the water level of Lake Balaton and of the water table in the neighboring marshland of Nagybárkány may be explained not (only) as a consequence of increased precipitation, but also as a result of the silting up of the drains built during the Roman age.

27 Gorbatenko (2016), 116; Monin/Shishkov 1979, 363 and fig. 10/13. Komar (2007–2008), 128–29 (largely on the basis of Shvec 1978) has noted that the level of humidity in the steppe lands north of the Black and Caspian Seas was much the same throughout the 6th century as it is at the present, but with higher summer temperatures.

Peninsula, “it is always wise to keep regional differences in mind, and it may be decisive in matter of climate and weather.”<sup>28</sup> While most scholars working on Western and Southern Europe are quick to have recourse to climate catastrophism when in need of a ready-made explanation of economic shifts in the post-Roman period, few in Eastern or East Central Europe have so far embraced environmental determinism.<sup>29</sup> Judging from the current state of research, which is still in its infancy, there is in fact little to no evidence that the climate changes taking place in the 5th and 6th centuries had any significant impact upon economic and social developments. Either under the influence of Marx’s fundamental idea that humans subjugate nature by their labor, or because in post-Communist Europe the “resilience theory” has a particularly strong appeal, archaeologists and historians studying the early medieval history of Eastern Europe have more often than not preferred social or economic explanations.<sup>30</sup>

28 Squatriti (2010), 819, citing Dutton (2008), 168–69.

29 The most prominent exception is the Estonian archaeologist Andres Tvauri, according to whom the climatic catastrophe of 536 (probably caused by “an immense volcanic eruption” or a comet striking the Earth) led to significant cooling of air temperature, a serious famine, and “mass fatalities”. See Tvauri (2012), 36; Tvauri (2014), 48. The Russian archaeologist Iurii Shevchenko has postulated an ecological crisis in order to explain the 5th- or 6th-century migration of the Slavs out of their primitive land in southern Belarus and northern Ukraine. However, according to him, the prime mover was not climate change. Instead, Shevchenko’s ecological crisis is entirely man-made: podsolization (caused by slash-and-burn agriculture) and epizootics (itself caused by the depletion of soils of basic metals, especially cobalt). The “cobalt deficiency” led to an ecological catastrophe, which led to migration. See Shevchenko (2002), 139–42, 143, 149–51, and 199; Shevchenko (1997). For a recent example of climate catastrophism as explanation for the collapse of the late antique rural economy in the West, see Cheyette (2008), 163: “the climatic downturn that began around 500 CE wiped the slate clean and what began to emerge two hundred years later was completely new.”

30 Redman/Kinzig (2003), 14: “Resilience theory seeks to understand the source and role of change, particularly the kinds of change that are transforming, in adaptive systems.”

**PART 1**

*The Roman Orbit*







## The Balkans during the Last Century of Roman Power (500 to ca. 620)

In a letter that he wrote in 536 or 537 to the provincials of Istria, Cassiodorus described their land as “especially blessed in three of its crops—wine, oil, and corn ... For what Campania is to Rome, Istria is to Ravenna—a fruitful province abounding in corn, wine, and oil; so to speak, the cupboard of the capital.”<sup>1</sup> The Roman senator may have tried to sweeten the pill, for he was about to announce to the provincials of Istria that besides the *annona*, they were now to comply with compulsory purchases (*coemptio*) as well. To ensure the delivery, a “man of great experience” named Laurentius was to be sent to Istria in order to purchase agricultural products either from merchants or directly from landowners at a fixed price.<sup>2</sup>

The situation at the opposite end of the Balkan Peninsula was very different. In 491, Emperor Anastasius was compelled to acknowledge the impossibility of collecting the *annona* in Thrace and to introduce the *coemptio*.<sup>3</sup> By the time Cassiodorus drafted his epistle to the Istrians, Emperor Justinian had issued three novels in an attempt to stop the ever-accelerating decline of the peasant population in the dioceses of Thrace and Illyricum.<sup>4</sup> The last novel mentions news from Moesia Inferior reaching the imperial ears. According to them, creditors, taking advantage of hard times (perhaps bad harvests), were

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- 1 Cassiodorus, *Variae* XII 22, 106; transl., 513. For the description of Istria in Cassiodorus' letter, see Matijašić (1988). For the date of the letter, see Novak (2007), 61.
  - 2 Cassiodorus, *Variae* XII 22 and 23, 106. For *possessores* as aristocrats owning the land, but not directly involved in trade with agricultural products, see Novak (2007), 47. Merchants (*negotiatores*, *naukleroi*) are mentioned in 6th-century epitaphs from Salona and Odessos; see Marin et al. (2010), 540–42 and Beshevliev (1964), 66–67.
  - 3 *Codex Iustinianus* X 27.2, 407–08. The reason was that the number of *coloni* had substantially diminished as a consequence of barbarian invasions. In other words, with a drastically shrinking tax base, the money collected from taxes was insufficient for maintaining the large number of troops stationed in Thrace. As a consequence, Anastasius imposed the *coemptio* not only on cultivators, but also on merchants, which exposed cultivators to the abuses of both tax collectors and merchants. See Velkov (1962), 58; Gorecki (1989), 225.
  - 4 The first novel (32) of 535 was addressed to Agerochius, the governor of Haemimons. Although at first glance it appears to apply to that province alone, its stipulations were repeated in novel 33 of that same year as if pertaining to “Thrace and all its provinces,” to be extended to Justinian's homeland (*Illyrica patria*). See *Novellae* 32 and 33, 240.

retaining cattle, sheep, and slaves as securities, and even confiscating lands as interest. Peasants were thus forced to forfeit their lands; some fled and some died of starvation, the general situation being described as worse than after a barbarian invasion.<sup>5</sup> It is not clear whether the “peasants” owned their lands, or owned them only partially, and rented the remainder. At any rate, there must have been an acute shortage of labor in the Balkans. Only seven years later, another law of Justinian forbade the use of soldiers (*stratiotai*) or *foederati* for work on one’s estates, a clear sign that few “peasants” have remained for the job.<sup>6</sup> In 545, the novel 128 introduced the *epibole* to the fiscal law, in order to cope with the demographic instability of the countryside upsetting the process of tax collection.<sup>7</sup> Every farmer was now burdened with liability for taxes from the lands abandoned by the next-door neighbors.<sup>8</sup> Justinian’s successor, Justin II granted tax exemptions in 566 for peasants, hired workers, tenants, and landowners in Moesia Inferior and Scythia Minor, while in 575 Tiberius II forbade the collection of taxes for four years from farmers or taxpaying landowners.<sup>9</sup>

What is the meaning behind this string of imperial edicts? Some believe that the laws prove the existence of a class of peasant smallholders and of farming as a primary economic activity in the Balkans.<sup>10</sup> However, no evidence of smallholdings has so far been found anywhere in the Balkans.<sup>11</sup> To be sure, Justinian’s novel 65 of 538 refers to the estates and vineyards of the bishopric of Odessos.<sup>12</sup> On the opposite side of the Balkan Peninsula, there are several mentions in the papal correspondence of estates in Dalmatia, both on islands and

5 *Novellae* 34, 241; Sarantis (2016), 201. The law required creditors to return the land and the securities, while at the same time setting interest rates at 1/8 of each measure of grain furnished, or one *siliqua* per solidus.

6 *Novellae* 116, 549–51. For the interpretation of this law as applying to the Balkans as well, see Tăpkova-Zaimova (1960).

7 *Novellae* 128, 639–40.

8 Gorecki (1989), 225.

9 *Novellae* 148 and 163, 722 and 750. According to Popescu (2005), 379, the main reason for the measure taken in 575 was poverty, as farmers could pay neither their dues to the landowners, nor taxes to the state.

10 Dinchev (2002), 161; Sarantis (2016), 200.

11 Two inscriptions from Silivri and Şarköy, respectively (both in the European part of Turkey) refer to a certain Zemocartos, whose properties they apparently marked [Velkov (1962), 62]. However, it remains unclear who Zemocartos was, what was his social position, and what kind of properties he owned.

12 *Novellae* 65, 339. An inscription found near Sliven, in Bulgaria, refers to an *episkepsis*, a state or church estate (Velkov, “Les campagnes”, p. 60 with n. 164).



FIGURE 2 Principal sites mentioned in the text and in the notes (ancient names in italics)

on the coast, each with multiple farms.<sup>13</sup> It is unlikely that any of those were smallholdings. Moreover, the lands of the bishopric of Odessos were in the environs of that city, while the papal estates could not have been too far from Salona (Fig. 2).<sup>14</sup> The *villae rusticae* that had once dotted the Balkan landscape were all gone by the mid-5th century, together with the large estates for which they had served as centers.<sup>15</sup> All rural villas that have been dated to the 6th century are in fact earlier foundations with a 6th-century occupation, for which no

13 Škegro (2004), 432; Nikolajević (1971), 284–92. By the time Procopius of Caesarea wrote his *Wars*, there were still large herds of horses near Aproi, in Thrace. They grazed on “imperial pastures,” most likely a *domus divina* (Procopius of Caesarea, *Wars* VIII 27.8, 338 and 340; transl., 525).

14 Škegro (2004), 436.

15 Poulter (1992), 122; Rashev/Dinchev/Borison (2005), 353. For an excellent survey of countryside villas dated between the 2nd and the 5th century, see Henning (1994).

indication exists of a similar function.<sup>16</sup> Indeed, the 6th-century occupation on the site of a *villa rustica* does not necessarily mean that the site was still a *villa rustica* in the 6th century. No solid evidence exists so far for a survival into the 6th century of any rural villas or estates.

In the northern and central regions of the Peninsula there is also no evidence of large-scale crop cultivation. Samples taken for paleobotanical analysis during recent excavations in Caričin Grad (near Lebane, Serbia) have shown cereal species (particularly bread wheat, broomcorn millet, and rye), with almost no chaff, stems or culm nodes.<sup>17</sup> This suggests that the cereal grains were brought from elsewhere, most likely as shipments of *annona*.<sup>18</sup> Similarly, the samples of grain seeds from Svetinja, a small fort near Viminacium (now Stari Kostolac, in northern Serbia) were mixtures of wheat, rye, barley, and millet, a clear indication of three-field rotation. Supplies of corn came from outside the small military settlement, most likely from the neighboring city of Viminacium, to which they were shipped via the Danube from rich provinces overseas.<sup>19</sup> At

16 For an early 5th-century villa discovered in Paliokastro, near Oraiokastros (on the northern outskirts of Thessaloniki), which was still occupied in the 6th century, see Marki/Akrivopoulou (2003). Similarly, at Findspot 500 in the Berbati Valley, a Roman villa was still occupied at much reduced scale after its abandonment; see Hahn (1996), 438. The site at Akra Sophia (near Corinth) was identified by means of a field survey, but Gregory (1985), 418 has hastily interpreted the finds as a “large and sumptuous villa of early Byzantine date.” This interpretation has been uncritically reproduced by Avramea (1997), p. 127, and Slavko Ciglenečki (2014), 241. For the 6th-century transformation of Roman villa sites, see also Begović/Schrunk (2001).

17 Birk et al. (2014), 7. According to Baron/Reuter/Marković (2019), 116, silos in the Lower Town at Caričin Grad consisted primarily of cleaned grain with very low weed content. Nonetheless, culm and husk of an unspecified cereal have been identified in two houses in the Upper Town. An almost identical profile is revealed by the paleobotanical analyses of seeds from Gamzigrad (near Zaječar, eastern Serbia); see Medović (2008).

18 *Contra*: Baron/Reuter/Marković (2019), 119, who believe that the evidence from some silos suggest the mixed, local cultivation of rye and bread wheat. However, the authors acknowledge the great similarity between the cereal spectra from sites in the submontane environment (Caričin Grad and Gamzigrad) and those in the fertile Danube valley (Iatrus-Krivina). They explain such similarity by assuming similar “environmental conditions,” but the same does not seem to apply to the faunal profiles of those sites, which are radically different. Moreover, Baron/Reuter/Marković (2019) completely ignore the very different soil conditions: Caričin Grad is located in a region of brown forest soils, which because of acidity and saturation may be good for vineyards, but not for the cultivation of cereals. See the Soil Map of Serbia, available online at [https://esdac.jrc.ec.europa.eu/images/Eudasm/RS/russ\\_x83.jpg](https://esdac.jrc.ec.europa.eu/images/Eudasm/RS/russ_x83.jpg) (visit of November 3, 2020). According to Marković/Reuter/Birk (2019), 38, the species cultivated locally either inside or outside the city walls were typically garden vegetables, such as beets and leeks, as well as peas, lentils, and bitter vetch.

19 Borojević (1987).

Nicopolis ad Istrum (Nikiup, near Veliko Tărnovo, in Bulgaria), the main cereal was millet, which could have well been grown on small plots close to or even inside the fort.<sup>20</sup> Consumption of millet has also been established on the basis of isotopic analysis for the population buried in the cemetery excavated in Sourtara Galaniou (near Kozani, northern Greece).<sup>21</sup> Elsewhere in Greece, there is evidence for both agricultural production and peasant settlements. For example, the paleobotanical studies of samples from the ash stratum inside a Hellenistic tower refurbished and occupied during the 6th century revealed that the inhabitants of the farmhouse in Pyrgouthi near Prosimna (Argolis, Greece) ate emmer and bread wheat, barley, and oats.<sup>22</sup> An ardshare and a sickle suggest that at least some of those crops were grown locally.<sup>23</sup>

However, the agricultural production went beyond subsistence levels. Greece certainly produced an agricultural surplus, which was exported outside Greece. That much results from a brief mention of imperial granaries by Procopius of Caesarea.<sup>24</sup> The same author tells the story of how, in 533, in order to prevent heavy losses among his troops inflicted by food poisoning from the rotten bread they had brought with them from Constantinople, Belisarius ordered the “bread of the country” around Methone (Messenia, southwestern Greece) to be delivered to his army.<sup>25</sup> In 551, the Ostrogoths captured on the coast of Epirus “some of the ships which were carrying provisions from Greece for the army of Narses.”<sup>26</sup> Greece exported more than just grain. Kilns for the production of Late Roman 2 (LR 2) amphorae have been identified between

20 Poulter (2007b), 77; Buysse (2007), 280. On the neighboring site at Dichin, samples taken from the charred seeds found in a 6th-century context include barley and rye, as well as wheat and millet; see Poulter (2019), 25. At Iatrus (Krivina, near Ruse, northern Bulgaria), the diet of the soldiers consisted of oats and peas; see Hajnalová (1982), 232; and Hajnalová (1991).

21 Bourbou (2009), 234; Bourbou et al. (2011), 578. The very low percentage of infectious conditions in the population of Sourtara Galaniou suggests fairly good living conditions and nutritional status; see Bourbou/Tsilipakou (2009), 127. For similar conclusions drawn on the basis of the analysis of a small cemetery excavated in Gorenji Mokronog (near Nove Mesto, Slovenia), see Leben-Seljak (2003), 407–10.

22 Hjøhlman/Penttinen/Wells (2005), 320 and 324. There are also seeds of Persian wheat (*durum*), which would indicate that corn was brought to Pyrgouthi from the outside, most likely the Black Sea region, and cleaned on site.

23 Hjøhlman/Penttinen/Wells (2005), 230 and 250; 229 fig. 93.

24 Procopius of Caesarea, *Buildings* IV 2, 234–35. Kosso (1993), 148 points out that grain levies being an important part of the regular taxation in the province of Achaia (southern Greece) is an indication of production beyond subsistence level.

25 Procopius of Caesarea, *Wars* III 13.20, 122; transl., 174; Anagnostakis (2002), 157–58; Germanidou (2014), 194.

26 Procopius of Caesarea, *Wars* VIII 22.32, 286; transl., 514; Gregory (2000), 114.

Ermioni and Portochelion (in Argolis), and a shipwreck with a cargo of the same type of amphorae is known from the vicinity of Portochelion. Given that LR 2 amphorae were commonly used for the transportation of wine or olive oil, their local production implies the production of those agricultural goods as well.<sup>27</sup> Wine and olive presses, complete with reservoirs, collections tanks, olive mills, and storage areas have been discovered during excavations in the episcopal complex at Louloudies near Katerini (Pieria).<sup>28</sup> An olive oil press was found in the urban milieu, at Philippi.<sup>29</sup> Wine presses are also known from the countryside. A wine press, either of the beam or of the screw type, was found in the easternmost room of a 6th-century house excavated in 1878 in Olympia.<sup>30</sup> Carbonized olive wood and grape pips are further indications of both olive oil and wine production in Pyrgouthi.<sup>31</sup>

No site in the regions of the Balkans located to the north from Greece has so far produced any comparable evidence. Conspicuously absent are rural, open settlements like Olympia or Pyrgouthi. According to Procopius, Justinian “made the defenses so continuous in the estates (*choria*), that each farm (*agros*) either had been converted into a stronghold (*phourion*) or lies adjacent to one that is fortified.”<sup>32</sup> At first glimpse, the implication is that peasant settlements were now adequately protected, but turning a farm into a stronghold is not exactly going to stimulate agricultural production.<sup>33</sup> In fact, Procopius describes how, at Thermopylae, local peasants “suddenly changed their mode of life, and becoming makeshift soldiers for the occasion,” kept guard on the defenses, instead of tilling the earth.<sup>34</sup> Procopius thus indicates

27 Opaït (1984), 317; Abadie-Reynal (1989b), 51–3; Hayes/Petridis (2003), 529; Curta (2011), 40.

28 Gerousi (2013), 35 and 36 fig. 23. The only other case of a wine press associated with an episcopal center is that of Byllis (Albania); see Beaudry/Chevalier (2014), 210; Chevalier/Beaudry (2018), 444 and fig. 6. According to Anastasios (2016), 186 and fig. 292, the (arch)bishopric of Thessalonica owned a number of water mills near modern Lakkia, to the east from the city. For the archaeology of 6th-century watermills in Greece, see Germanidou (2014).

29 Zachariadis (2014), 705. Another wine press has recently been discovered in Odessos (Varna, Bulgaria); see Iotov (2018), 227 and 236 pl. II. A wine merchant from Alexandria is mentioned in an inscription found in Tomis (Constanța, Romania), but it is not clear whether he was buying or selling wine there; see Barnea (2005), 22–23.

30 Völling, (1996), 404. A large hoard of coins and agricultural implements found in 1877 in Olympia includes five billknives—tools that were typically used in viticulture; see Völling (1995), 425–41; pl. 97a. For the “Byzantine village” in Olympia, see also Gutsfeld (2013).

31 Hjøhlman/Penttinen/Wells (2005), 245 and 251.

32 Procopius of Caesarea, *Buildings* IV 1, 228–29.

33 Procopius even gives an example of a village entirely transformed into a stronghold, due to the emperor’s munificence (*Buildings* IV 1, 304–05).

34 Procopius of Caesarea, *Buildings* IV 2, 234–35; Curta 2001a, 205.

that the unexpected consequence of Emperor Justinian's policies was that agricultural occupations were now abandoned, albeit temporarily, until regular troops could be found to replace the "makeshift soldiers for the occasion." The evidence of Procopius is corroborated by other sources. According to Agathias, when Zabergan's Cutrigurs invaded the Balkans in 558, they quickly reached Thrace after crossing many *deserted* villages in Moesia and Scythia Minor.<sup>35</sup> The only evidence for the survival of a significant peasant population comes from the hinterland of Constantinople. According to Theophylact Simocatta, at about 15 miles distance from Heraclea (Perinthus) there was a village with a large population that supplied the imperial armies with food.<sup>36</sup> Elsewhere, the existence of open settlements with exclusively agricultural functions remains doubtful. While it is true that the archaeology of Late Antiquity in the Balkans has typically focused on urban centers, much has been done in recent decades for the study of the countryside. Notwithstanding such efforts, the evidence for rural settlements after ca. 500 is remarkably scanty: a single-roomed house at Kurt Baiâr, near Slava Cercheză (Dobrudja, Romania) and the remains of two others at Novgrad, not far from Iatrus, in northern Bulgaria.<sup>37</sup> In the absence of open settlements, could the numerous hillforts in the Balkans have been fortified villages? Some believe indeed that the hillforts offered shelter to the urban and rural populations fleeing the lowlands under the continuous threat of barbarian raids.<sup>38</sup> Others refuse to treat fortified sites either as refuges or as purely military, primarily because of the evidence of women and children inside the forts. According to such views, the empire could not possibly have administered all those sites. Those were therefore villages, the agrarian character of which is further betrayed by finds of agricultural implements.<sup>39</sup> To others, there is no identity or even similarity between the hilltop sites in the northern Balkans, which were temporary refuges, and those "regularly built fortifications on the frontier, which more obviously performed a military role."<sup>40</sup> However, agricultural implements found on hilltop sites in the central and northern Balkans have often been misdated, as many of those sites were reoccupied in the 9th and 10th centuries. In several cases, the tools in question are to be associated

35 Agathias, *History* v 11, 177; Popescu (2005), 378.

36 Theophylact Simocatta, *Histories* vi 1.4, 221.

37 Opait/Bănică (1992), 105–06; Stefanov (1974), 291–92.

38 Dunn (1997), 144; and Dunn (2004), 551–52.

39 Milinković (2012); Milinković (2014); Milinković (2016), 508. Such views have been earlier expressed by Bulgarian scholars as well: Nikolov (2002), 28; Kirilov (2007), 337–38.

40 Poulter (2004), 247; Poulter (2007a), 380.



with the early medieval, and not with the late antique phase of occupation.<sup>41</sup> On the other hand, mattocks and pick-axes, such as found in abundance in late antique hoards together with sickles and billknives fit very well into the picture of small-scale cultivation of crops inside or immediately outside the walls of the fort. The evidence of the written sources further substantiates that conclusion. According to Theophylact Simocatta, in 583, when attacking Singidunum by surprise, the Avars “encountered the majority of the city’s inhabitants encamped in the fields, since the harvest constrained them to do this; for it was summer season and they were gathering their subsistence.”<sup>42</sup> Whether or not the garrisons of the many 6th-century forts were made up of “makeshift soldiers for the occasion,” by AD 500 there were certainly fewer peasants in the Balkans than in 400, and virtually no peasants at all by 600. The author of the *Strategikon*—a military treatise written around 600—recommended that when campaigning north of the Danube River, in Sclavene territory, Roman troops should not destroy provisions found in the surrounding countryside, but instead ship them on pack animals and boats “to our country.”<sup>43</sup>

That Roman soldiers had to rely on food supplies captured from the enemy suggests that there was no large-scale production of food in or around the fortified sites in the Balkans. The analysis of faunal remains from Iatrus has shown that the soldiers in the garrison relied heavily on hunting for meat procurement.<sup>44</sup> Animal bones have also been found on other sites, but few have been analyzed by zooarchaeologists.<sup>45</sup> On sites in Dobrudja, bones of cattle are predominant.<sup>46</sup> By contrast, in faunal assemblages in the interior of

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41 Curta (2013a), 822–31. Without an archaeological context such as that of a hoard, it is virtually impossible to date any individual implement, for agricultural tools changed very little throughout Late Antiquity. See Popović (1994–1995); Cholakov (2012), 77–78.

42 Theophylact Simocatta, *History* I 4.1–2, 46; transl., 24–25. For a similar episode in Thessalonica during the early years of Heraclius’ reign, see the *Miracles of St. Demetrius* II 2.199, 185.

43 *Strategikon* XI 4, 380; transl., 124.

44 Bartosiewicz/Choyke (1991), 196; Poulter (2019), 25. This interpretation is further substantiated by the great number of dogs, most likely used for hunting. Wild animal bones have also been found in at least two burial assemblages from the large cemetery excavated in Kranj (Slovenia); see Stare (1980), 111 and 112. By contrast, there are very few bones of wild animals at Tonovcov grad (near Kobarid, northwestern Slovenia), where faunal assemblages are dominated by sheep and goats; Toškan/Dirjec (2011), 310 and 361.

45 Condurachi (1957), 19; Mano-Zisi (1958–1959), 312–13; Ciglenečki (2000), 19–27; Radu/Stănică (2012), 479–80.

46 Stanc/Bejenaru (2013). The same is true for sites in northern Bulgaria, next to the Danube. See Benecke (2007), 384–86, 385 table 1 and 386 fig. 1; Kroll (2010), 59 with fig. 21; Poulter (2019), 25.

the peninsula, at Caričin Grad, sheep and goats dominate.<sup>47</sup> Sheep and goats were also the most common animals at Pyrgouthi.<sup>48</sup> Judging by the age of slaughter, most animals were used for secondary products, not for meat. Those products may have in turn become the raw materials for local industries. A weaving shop, for example, was found outside the city walls of Thessalonica, with many loom weights inside it. It remains unclear what was the origin of the raw material, possibly wool.<sup>49</sup> There was also a tannery in the city center, and a partially preserved inscription contains an edict with restrictions on imports of tannage and penalties for those breaking the law.<sup>50</sup> It is therefore possible that raw materials for the local leather industry in Thessalonica came from outside the Balkan Peninsula as well. This was definitely the case for furriers mentioned in epitaphs from Odessos, Edessa, and Thessalonica.<sup>51</sup> It may also apply to the textile industry attested by epitaphs of cloth carders and linen salesmen in Edessa and Thessalonica.<sup>52</sup> Weaving, however, was definitely a household industry, as indicated by finds of loom weights in forts, or even among grave goods in associated cemeteries.<sup>53</sup> As a matter of fact, there is little evidence of organized workshops inside forts, despite attempts to turn finds of slag or occasional moulds and anvils into the material culture correlates of smithies and jeweler's shops, respectively.<sup>54</sup> A metallurgical workshop

47 Marković/Stamenković (2016), 221; Baron/Reuter/Marković (2019), 120; Marković/Reuter/Birk (2019), 25–26. The same is true for Byllis [Chevalier/Beaudry (2018), 442] and Butrint, both on the western coast of the Balkan Peninsula [Kroll (2010), 39 with fig. 16]. In addition, pigs were the second most important food mammal at Butrint, most likely bred on the site; see Bowden et al. (2020), 31, 32, and 40. While the percentage of wild animals in faunal assemblages from Caričin Grad is very small, a workshop for antler processing located in the southeastern tower of the Lower town precinct used shed antlers of red deer as raw materials. Similarly, while animal bones have been found only in one house from Vršenice, no less than five cowbells are known from the site—the only evidence of cattle on the site; see Popović/Bikić (2009), 87 fig. 62.

48 Hjøhlman/Penttinen/Wells (2005), 252 and 303.

49 Antonaras (2016), 221.

50 Antonaras (2016), 206 and 207 figs. 336–37; Feissel (1983), 84–86. Leatherworking is also documented by 6th-century epitaphs of a *corarius* and of no less than four shoemakers in Salona [Marin et al. (2010), 486–87, 550–52, 575–76, and 803–04].

51 Beshevliev (1964), 69–74 and 88–89; Feissel (1983), 49 and 138.

52 Feissel (1983), 44, 48, and 147. A weaving workshop was recently found in Thessaloniki outside the city walls during salvage excavations for the construction of a subway station; see Paisidou/Vasiliadou/Konstantinidou (2010), 227; Antonaras (2017a), 115.

53 Loom weights in forts: Popović (1987), 24; Uenze (1992), pl. 16/6; Milinković (2010), p. 97 fig. 87; Popović/Bikić (2009), 94 fig. 74/7; Poulter (2019), 299; 300 fig. 11/9.144, 145, 147; 301 fig. 11/10.150, 153. Loom weights in graves: Bolta, (1981), pl. 5/13.

54 Jeweler's shop: Bogdan-Cătăniciu (1979), 189. Slag: Bolta (1978), 50; Milinković (2010), 73–76; Pencheva (2010), 36. Werner (1992), 411 wanted to see a smithy in the pentagonal



FIGURE 3 Butrint (Albania), view towards the southern wing of the Triconch Palace, where blacksmithing was practiced in the 6th century  
PHOTO BY THE AUTHOR

was found to the north of the Baths of Galerius in Gamzigrad (near Zaječar, in eastern Serbia), complete with a smelting furnace and two blacksmith furnaces full of iron objects, slag, and an anvil.<sup>55</sup> However, this was an exceptional find, for the 6th-century settlement on the site of the imperial palace complex at Felix Romuliana was located in the middle of the mining district of eastern Serbia.<sup>56</sup> The only other furnaces for smelting ores are known from the environs of Caričin Grad and from Louloudies.<sup>57</sup> Blacksmithing was practiced during the second quarter of the 6th century in the southern wing of the Triconch Palace in Butrint (Albania; Fig. 3), where, in addition to hammerscale and charcoal deposits, archaeologists found a furnace that had been repaired

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tower at Sadovska kale. Similarly, Dinchev (2001), 229 believes that ironworking is archaeologically documented for the late 5th and 6th century at Gabrovo, Shumen, Sadovska kale and elsewhere. Curta (2001c), 162–63 interpreted house 3 in Svetinja as a smithy. However, Curta (2017a), 448 abandons that interpretation in favor of “a repair workshop or a storage room.”

55 Petković/Živić (2006), 135–48; Živić (2009).

56 Petković (2009); Petković (2011), 269. For mining in central Serbia, see Ivanišević (2017), 96. Little is in fact known about mining in the 6th-century Balkans and no mine has been so far explored archaeologically.

57 Petković (1938), 83; Marki (1995), 198–99.

multiple times. The activity appears to have been seasonal, with structures being abandoned in the winter to be repaired or rebuilt during the following season.<sup>58</sup> Exactly what was produced in the Butrint smithies is unclear, but it is important to note that no agricultural implements are associated with any of those smithies. It is unlikely that such tools were manufactured locally. A cargo of a shipwreck discovered near Nin and dated to the 6th century strongly suggests that such implements may have in fact been brought from some other province outside the Balkan Peninsula.<sup>59</sup>

A metalworking shop with a circular kiln was found in Thessalonica. The associated finds include masses of clay and bronze (or copper), two crucibles with metal residue inside, and several stone and clay moulds for casting spherical buttons, rings, amulets, and crosses with Greek inscriptions.<sup>60</sup> No crucibles have been found in the postern of the Upper City in Caričin Grad, but on the basis of only three stone moulds for casting belt fittings, the structure has been hastily interpreted as workshop, much like the row of buildings next to the western portico of the South Street in the Lower City, where more steatite moulds have been discovered together with ceramic moulds for casting fibulae with bent stem and with two models made of lead. Furthermore, another workshop has been identified in the Lower City at Caričin Grad on the basis of bronze dies for strap ends and belt fittings, crucibles and goldsmithing tools.<sup>61</sup> While casting seems to have been a popular technology, dies, which imply the use of snarling, were just as common on 6th-century military sites in the Balkans.<sup>62</sup> The only other artisanal activity archaeologically documented on those sites is ceramic production. Most kilns for tiles and bricks operated to meet local building demands.<sup>63</sup> However, some, at least, of the kilns for pottery seem to have produced for larger areas. This is particularly true for Greece,

58 Bowden et al. (2011), 87–88 and 96; Bowden (2011), 311. More smelting furnaces are known from rooms 22 and 24 of the Triconch Palace; see Bowden et al. (2011), 105.

59 Henning (1987), 60.

60 Antonaras (2016), 158 and 160 fig. 220.

61 Ivanišević (2018), 712–18. For other finds from the urban environment, see Daskalov, (2012), 113 and 114; 256 fig. 86/3. Moulds are also known from forts: Dănilă (1983), 559; Daskalov/Dimitrov (2001), 70 and 69 fig. 1/3; Uenze (1992), pl. 9/6; Aladzhov (1995), 225 fig. 30; Oanță-Marghitu (2006), 347 and pl. 1/4; Daskalov (2004), 91–2.

62 Vinski (1968), 109; Vitliyanov (1993), 166 and 170; 167 fig. 1; Iotov (1998), 72 and 74 fig. 1/2, 3; Daskalov/Dimitrov (2001), 70 and 69 fig. 1/2; Ivanišević (2010), 770 fig. 19/8; Iotov (2013), 427–29 and 436 pl. 8. Snarling is a metalworking technique that consists in embossing the ornament from underneath or inside a thin metal surface by means of hammering it against a die.

63 Irimia (1968); Radu/Stănică (2012); Angelova/Băchvarov (2013), 565; Antonaras (2016), 110 and 111 fig. 107; Iotov/Kharizanov (2017). According to Milchev/Koicheva/Dimitrov (2003), the kilns for tiles and bricks that were built in the 3rd century in Kramolin (near Sevlievo, in northern Bulgaria) were still in operation in the 6th century.

where during the 6th century local potters imitated ceramic fashions originating in Egypt or the eastern Mediterranean and the very popular lamps from North Africa.<sup>64</sup> In the northern Balkans, kilns have been found both inside and immediately outside military sites. They produced a wide variety of ceramic forms, but no detailed study of fabrics and no provenance analysis have so far been carried out to establish the distance at which the locally produced pottery could have travelled to meet the demand at other military sites.<sup>65</sup> Several lamps were produced with moulds found in one of the towers of the hillfort in Kranevo (near Varna, Bulgaria), and some of the mould-linked specimens have been found on sites located at some distance from each other.<sup>66</sup> However, it was not only lamps that traveled. Lamp moulds have been found in room 4 on the second level of the Building with Mosaic Pavement excavated in Tomis (Constanța, Romania). The archaeological context in which they were discovered strongly suggests commercial associations: produced elsewhere, the moulds in question had been brought to Tomis by sea and were about to be shipped to another destination, where they would have been used for the production of lamps.<sup>67</sup>

One of the most conspicuous differences between cities and forts in terms of artisanal production is glass working. There is no evidence of secondary glass working on any of the military sites in the northern or northwestern Balkans.<sup>68</sup> Glassworkers are known from epitaphs discovered in Athens and Salona, but no such workshops have been found in any of those cities.<sup>69</sup> A glass- and metalworking shop was discovered in the ruins of a Roman building at Philippi.

64 Karivieri (1998), 424 and 426; Petridis (2010), 90–91; Schauer (2010), 32; Curta, (2016), 59; Vionis (2017), 145. For the pottery workshop next to the precinct of the sanctuary in Delphi, see Petridis (2003), 443–46; Petridis (2010), 36–38, 40, 45–53, and 55–95. For a typology of ceramic kilns found in Greece, see Raptis (2012 and Hasaki/Raptis (2016).

65 Janković (1986), pp. 105–07. A kiln for pottery was found next to the triangular tower on the eastern curtain at Silistra [Durostorum; Pencheva (2013)]. At Novae, one kiln was found to the northwest from the episcopal residence, another just outside the northern curtain. See Biernacki/Klenina (2014), 151; Tomas (2015).

66 Curta (2016f), 86–7 and 94; Toncheva (1952).

67 Curta (2016f), 78–79.

68 Gomolka (1976), 40 has advanced the idea of glass-working workshops in Thrace, but without any archaeological arguments. Perko (2005), 70 affirmed the existence of a glass workshop in Kranj, which was however rejected by Milavec (2015), 280. Šiljeg (2009) announces the discovery of a glass workshop in Mala Luka, on the island of Krk (Bay of Kvarner, Croatia), but without much detail.

69 Stern (2012), 56–57 and 57 with n. 29; Marin et al. (2010), 574. A glass-working shop is believed to have existed in one of the small rooms set up in the corridors of the Peribolos of Apollo in Corinth, but no information has been published to confirm that interpretation [Avramea (1997), 113].

This may well have been the shop in which the stained glass windows were produced, which adorned the second building phase of both basilica C and the extramural basilica.<sup>70</sup> Three glass-making workshops have been found in Louloudies, one of which had a circular furnace.<sup>71</sup> Another three workshops are known from Thessaloniki. One of them was identified by means of testing droplets, clay masses with layers of glass (possibly parts of a furnace) and many fragments of stemmed beakers, deep bowls, lamps, and funnel-mouthed vessels.<sup>72</sup> Another had three furnaces, one of them with five consecutive phases of use and repair. Wasters, a very large quantity of testing droplets, and tubular endings of blown glass gathers strongly suggest that glass was produced there by dip mould blowing.<sup>73</sup> In addition to the same types of glass vessels, there were also fragments of windowpanes and gems.<sup>74</sup> No comparable evidence exists for the central and northern Balkans. At Caričin Grad, the existence of a glass workshop in the southeastern tower of the Lower Town has been hastily proposed on the dubious basis of vitrified bricks and a ceramic crucible.<sup>75</sup> Glass finds are known from several military sites in the northern and northeastern Balkans, but without evidence of local workshops, it is likely that the glassware was brought there from elsewhere. The types of glass vessels and lamps found on those sites are not different from those associated with glass workshops in Louloudies or Thessaloniki, but analyses performed so far using the combined method of proton induced X-rays and gamma rays (PIXE-PIGE) demonstrate that the glassware from various sites in the Balkans is of one of two types (Foy's 2.1 and 3.2 groups) produced in Egypt.<sup>76</sup> In other words, whatever the workshops in Philippi, Louloudies, and Thessaloniki produced, it was only for strictly local use, and not for sites farther into the interior.

The picture drawn so far seems to be one of a fundamental polarity of the Balkan Peninsula: an economy of subsistence in the northern part, and a

70 Hattersley-Smith (1988), 158.

71 Marki (1995), 198–99; Angelkou (2004), 67 and 66 figs. 12–14.

72 Petsas (1966); Antonaras (2010), 94–95; Antonaras (2017b), 31–33.

73 Antonaras (2017b), 17–19.

74 Akrivopoulou (2010); Antonaras (2014); Antonaras (2017b), 33–41. For the glass gems produced in that workshop, see Antonaras (2014).

75 Vlvanišević/Stamenković (2010). There are numerous fragments of windowpanes, vessels, and lamps found on the site. None of them was associated with the supposed workshop; see Drauschke/Greif (2010b). The chemical analysis of 26 chunks of raw glass from Caričin Grad has demonstrated that the majority was made of a soda-lime composition very similar to traditional Roman glass formulations; see Drauschke/Greif (2010a), 37.

76 Cholakova/Rehren/Freestone (2016), 629; Balvanović/Stojanović/Šmit (2018), 1184; Milavec/Šmit (2020), 278–79. See also Šmit et al. (2013). For the two groups of glassware, see Foy et al. (2003), 46–47, 55, 61–65, and 68–71.

thriving agricultural economy in the south supporting the prosperity of several urban centers of industrial activity. That the south was connected to the commercial networks of the empire results from the activity of the local mint in Thessalonica. After beginning, under Emperor Justin I, to strike all copper denominations introduced by the monetary reform of Emperor Anastasius, the mint suddenly switched to a local system of denominations, which consisted of 16, 8, 4, 2 and 1 nummia pieces (no folles were struck in Thessalonica after ca. 530 and until ca. 600). On the basis of a thorough examination of the dies, the production of coins was estimated at between 15 and 45 million coins, which suggests that the coinage was meant to respond to a considerable demand of cash for a large number of low-value transactions on the local markets.<sup>77</sup> To judge by the evidence of hoards from Macedonia, well into the last third of the 6th century, the local system of denominations was preferred to those produced in Constantinople before 538.<sup>78</sup> Moreover, the 2-nummia coins struck in Thessalonica reached distant market in Dobrudja, Asia Minor, the Near East, a clear indication of commercial exchanges.<sup>79</sup> After 562, the local system of denominations was rapidly eliminated, and the imperial government gave the mint in Thessalonica the important task of supplying the eastern provinces with half-folles, a denomination accepted and used on most markets across the empire.<sup>80</sup>

Coins cannot be used to establish the boundary between the two economic zones in the Balkans, but an examination of commercial relations can provide some guidelines. African Red Slip (ARS) and Phocaean Red Slip (PRS, also known as Late Roman C) wares appear everywhere in late 5th- and early 6th-century Greece.<sup>81</sup> They were also a familiar presence on both the western and the eastern coast of the Peninsula.<sup>82</sup> Much more interesting, however, is the presence of ARS, but not of PRS in the interior, both at Caričin Grad, and at neighboring military sites such as Ras, Postenje, and Vrsenice.<sup>83</sup> This

77 Metcalf (1976); Hahn (2000), pp. 38–39 and 64–65. For a cautious approach to those estimates of mint output, see Gândilă (2018b), 431 and 441.

78 Gândilă (2018b), 431 and 434.

79 Gândilă (2018b), 435.

80 Gândilă (2018b), 444 and 468–69.

81 For example, at Argos, for which see Abadie-Reynal (1989a), 155–56. For the definition of ARS and PRS, see Vroom (2005), 32–38.

82 Western coast: Dvoržak Schrunk (1989), 94; Shkodra-Rrugia (2008); Reynolds (2010), 97; Cirelli (2015), 107–08. Eastern coast: Mocanu (2012). Sodini (2000), 194 is therefore wrong when claiming that Boeotia, Attica, and the Peloponnese were the only regions in the Balkans that were open to ARS.

83 Bikić/Ivanišević (2012), 43–44. According to Borisov (1988), 106, PRS appear at Karanovo (near Sliven, in central Bulgaria), but there is no indication of chronology.

substantiates an older idea that the ARS was linked to the kind of long-distance trade that moved the grain *annona* to the regions of greater concentrations of troops, while the PRS was more of a local commodity, which moved from harbor to harbor in what may have been a regional network of trade.<sup>84</sup> That the demand for red-slipped wares increased during the 6th century results from the examination of ceramic percentages from sites in Greece.<sup>85</sup> Red-slipped wares imitating ARS or PRS were also produced locally, in Athens, during the first decades of the 6th century, as well as in Boeotia, during the second half of that century.<sup>86</sup> A response to a relatively high demand in the 6th century for fine pottery, imitations did not move, however, too far beyond the center of production, often in a relatively restricted area of distribution.<sup>87</sup>

Equally revealing is the evidence of amphorae. Late Roman 1 (LR 1) specimens produced in Cilicia, near Antioch, in Cyprus, as well as in Rhodes were used for transporting wine or dried goods such as frankincense, myrrh, or mastic. They were the commonest of all amphorae at Argos, in Greece, at Durrës, in Albania, at Constantinople, and on many military sites in the Balkans.<sup>88</sup> LR 2 amphorae were produced in the Aegean, but also in the southern Argolid. They transported wine or olive oil. Such amphorae are very common on 6th-century sites in Greece, as well as in forts from the northern parts of the Balkan Peninsula.<sup>89</sup> Types produced in Palestine (Late Roman 4–6), which were

84 Abadie-Reynal (1989a), 157. The PRS predominates on such sites as Philippi in Greece or Murighiol in Dobrudja [Sodini (2000), 188].

85 At Demetrias (near Volos, in Thessaly), during the last phase of occupation, 80 percent of all fine, red-slipped wares were PRS. No ARS or PRS forms were found on the site that could be dated later than the middle of the 6th century. By contrast, in Corinth, the quantity of both ARS and PRS increased during the second half of the century, and ARS forms of a later date (Hayes 104, 105, 107, and 109) have been found in deposits dated as late as the middle or the third quarter of the 7th century. See Sodini (2000), 181–82; Bonifay (2005), 570; Warner Slane/Sanders (2005), 274.

86 Hayes/Petridis (2003), 533; Vroom (2005), 40–41.

87 Boeotian red-slipped wares have been found in Corinth [Warner Slane/Sanders (2005), 284], and local imitations are known from Argos [Aupert (1980), 417–18].

88 Opaït (1984), 320; Abadie-Reynal (1989b), 51–56; Hayes (1992), 64; Alfén (1996); Opaït (2004), 8–10; Shkodra (2005), 136.

89 Steckner (1989), 64–65; Abadie-Reynal (1989b), 51 and 53; Mackensen (1992), 241; Opaït (2004), 10–12; Chatziioannidis/Tsamisis (2013); Heath et al. (2015); Curta (2016a), 308–11. According to Opaït (2004), 105, the reason for the large number of LR 1 and 2 amphorae in the Balkans is the enormous demand of olive oil for the troops stationed in the Danube region, given that the annual consumption per soldier may have been as high as 20 liters. According to Auriemma/Quiri (2007), 40–41, LR 2 amphorae appear only sporadically on the western coast of the Balkan Peninsula. However, the shipwreck from Lastovo (off the northwestern coast of the island of Premuda, Croatia) had a cargo of LR 2 amphorae [Perko (2005), 56–57]. Wickham (2006), 781 believes that the capillary distribution of LR 2



common in the Western Mediterranean area and in Gaul, where they certainly transported wine, are restricted to sites in Greece, such as Argos and Corinth, and have not so far appeared in the interior of the peninsula.<sup>90</sup> The polarity of this distribution of amphora finds has been explained in terms of different networks of exchange. Like ARS, amphorae of the LR 1 and 2 types transported *annona* commodities primarily for the army, while the Palestinian amphorae indicate “free-market commerce.”<sup>91</sup> The association between the state-run distribution of the *annona* and LR 2 amphorae follows also from plotting on a map the most important sites in the Balkans that have produced remains of such amphorae (Fig. 4).<sup>92</sup> There are only a few finds on the western coast and in the central region of the Balkan Peninsula, and none whatsoever in the northwest. The western and northwestern parts of the Balkans are in fact not devoid of amphora finds. On the contrary, that seems to be the almost exclusive area of the small, elongated type known as *spatheion*, which originated from North Africa and was used for transporting wine, olive oil, or fish sauce.<sup>93</sup> By contrast, most sites with LR 2 amphorae are in the eastern and northeastern Balkans, which suggests that those amphorae entered the interior mostly from the Black Sea coast, and that the Danube operated as the main line of distribution for most forts in the region. This confirms the recently advanced idea of two different distribution networks, one originating in North Africa, the other in the Aegean.<sup>94</sup> If so, it is perhaps worth noting that the region of the Balkans that lacks both LR 2 amphorae and *spatheia* is right in the center of the peninsula—Macedonia.<sup>95</sup> The reason for this curious absence may well be that Macedonia was supplied from Thessalonica with all necessary goods, which traveled in other types of containers than LR 2 amphorae or *spatheia*. At any rate, that network of exchange was not tied to any state-run distribution

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amphorae in the Aegean is the sign of a commercial network. That does not apply, however, to the distribution of such amphorae in the northern Balkans.

90 Touchais (1982), 542 fig. 25; Abadie-Reynal (1989b), 54; Warner Slane/Sanders (2005), 278. For a rare example of a Late Roman 5 from the northern Balkans, see Swan (2007), 261.

91 Abadie-Reynal (1989a), 159; Karagiorgou (2001).

92 Curta (2016a), 310 fig. 1.

93 Mackensen (1987), 258; Mackensen (1992), 250–51; Knific (1994), 220; Perko (2005), 66; Modrijan (2011), 143. Together with ARS, African amphorae continued to reach the western coast of the Balkan Peninsula during the 7th century. See Bushi/Xhaferaj (2018), 908. *Spatheia* have now been documented both in the northern and in the eastern Balkans as well: Swan (2007), 261; Shtereva (2009), 86–87.

94 Reynolds (2004), 241.

95 For the concentration of forts in Macedonia, see the map published several times by Milinković (2007), 170 fig. 6; Milinković (2016), 507 fig. 1; Milinković (2017), 24 fig. 7. For a 6th-century, LR 1 amphora from Pčinja, see Georgiev (1985), 207 fig. 4.

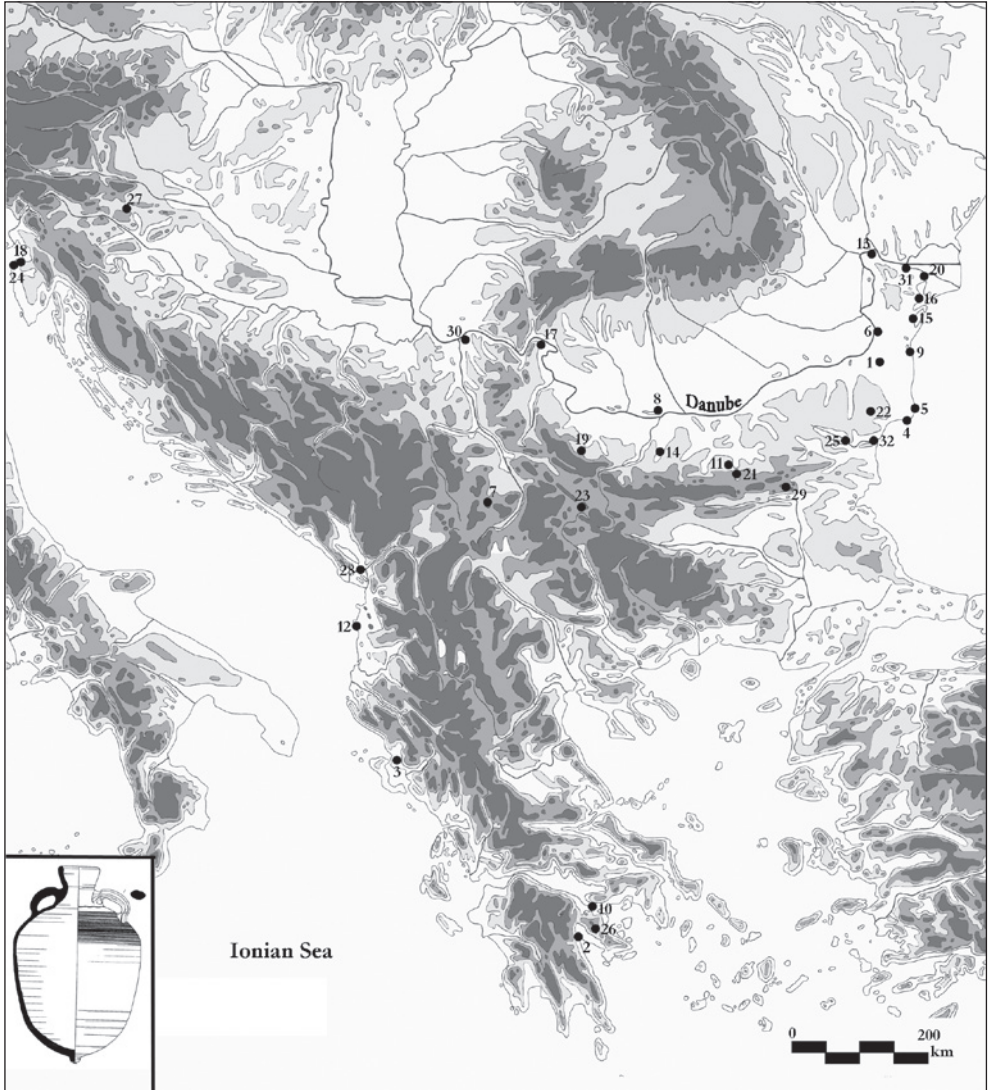


FIGURE 4 The distribution in the Balkans of 6th- to early 7th-century Late Roman 2 amphorae:  
 1—Adamclisi; 2—Argos; 3—Butrint; 4—Cape Kaliakra; 5—Cape Shabla; 6—Capidava;  
 7—Caričin Grad; 8—Celei; 9—Constanța; 10—Corinth; 11—Dichin; 12—Durrës; 13—Garvân;  
 14—Golemannovo Kale; 15—Histria; 16—Jurilovca; 17—Kladovo; 18—Koper; 19—Montana;  
 20—Murighiol; 21—Nikiup; 22—Odârci; 23—Pernik; 24—Piran; 25—Provadiia;  
 26—Pyrgouthi; 27—Rifnik; 28—Shkodra; 29—Sliven; 30—Stari Kostolac; 31—Tulcea;  
 32—Varna

network. Marble from Thasos was shipped only to Macedonia and central Greece to be used for buildings, and the trade with Thasian marble could well mirror the general layout of the distribution network for most forts in Macedonia.<sup>96</sup> But where did the LR 2 amphorae made in the Argolid go? It has recently been noted that in the 6th century, a new type of settlement appeared in the coastal regions of Greece and on the islands, a type for which there is no parallel anywhere else in the Balkans. Those settlements (aptly called *emporía*) had a population that lived primarily on land as farmers (either owners of small plots or tenants), but at the same time engaged in activities at sea, especially trade and fishing, as well as various crafts. There is clear evidence of commercial contacts with distant regions in Diporto (on Makronissos, in the Bay of Domvrena), Chinitza (in the Argolid Bay), and Kephalos (off the southern coast of the Ambracian Gulf).<sup>97</sup> There is nothing in that archaeological record of long-distance contacts that would point to the northern or northwestern Balkans. Such settlements may have operated as local markets, and as major distribution centers for much larger markets in the empire, but judging from the evidence available so far, they were not designed to supply the poor provinces in the north. Without a systematic study of the fabrics of all known LR 2 amphorae from the Balkans, it is also impossible to gauge the contribution of Greece to the relief provided in the 6th century to the northern parts of the peninsula.

From where did that relief then come? The distribution of LR 2 amphorae in the eastern Balkans overlaps with that of 6th- to 7th-century seals, many of which are associated with the *quaestura exercitus* that Justinian introduced in 536.<sup>98</sup> That administrative unit combined territories at a considerable distance from each other, such as the northernmost Balkan provinces (Moesia inferior and Scythia minor) with some islands in the Aegean Sea, Caria, and Cyprus, all ruled from Odessos (present-day Varna, Bulgaria) by a prefect. The only link between those disparate territories was the sea and the navigable Danube. Since Cyprus, the Aegean islands, and Caria represented the most important naval bases of the empire, but were also among the richest provinces, the rationale behind this new administrative unit was to secure both militarily and financially the efficient defense of the Danube frontier.<sup>99</sup> The

96 Herrmann et al. (2002).

97 Gregory (1984); Konti (1997), 344; Veikou (2012), 182–84. For 6th-century *emporía*, see Veikou (2013), 129–30.

98 Curta (2016a), 311–29. The seal of a “prefect of the islands” named Theodore that was found in Constanța has rightly been interpreted as belonging to the *quaestor exercitus*.

99 *Novellae* 41, 262–63; John Lydus, *On Powers* II 28–29, 124–29. Justinian set aside for the prefect of Scythia “three provinces, which were almost the most prosperous of all” (John

main responsibility of the *quaestor exercitus* was the collection and distribution of the *annona* for the army in Moesia Inferior and Scythia Minor. He redirected taxes collected in Caria, Cyprus, and the Aegean islands towards the troops stationed in those two provinces, either in cash (to pay the soldiers) or, more likely, in kind.<sup>100</sup> This new arrangement was meant to alleviate the problems of the provinces in the northern Balkans which had large numbers of soldiers stationed on their territory, but a rapidly declining population that could neither pay taxes nor support the troops coming to its defense. The appearance of coins struck in the mint of Alexandria on the eastern coast of the Balkan Peninsula points to the same direction: shipments of *annona* from the prosperous provinces overseas moved large amounts of goods to the main ports of the Black Sea.<sup>101</sup> But how was the *annona* then distributed farther to the remotest military sites in the northern Balkans?

A great many 6th-century hoards of bronze coins have been found on military sites in the northern Balkans. The accumulation of bronze in those hoards, particularly in those dated to the last two decades of 6th and the first decade of the 7th century, is almost exclusively associated with the military.<sup>102</sup> Unlike hoards in other parts of the empire, several of those in the northern Balkans include not only coins, but also balances and weights. Such artifacts, as well as the presence in the Balkans of hoards of gold (each with no more than 10 coins) point unmistakably to payments of *donativa* in gold.<sup>103</sup> Soldiers took the golden coins to the imperial *campstor* (money changer) attached to their unit in order to get small change in copper coins. Such a scenario is primarily based on the evidence of a funerary inscription found in Makriköy (now in Bakırköy, in the European part of Turkey). The inscription mentions a certain John, son of Hyakinthos, who “followed the expedition” as imperial *campstor* and died somewhere in the Balkans, probably while on campaign, on August 21, 544.<sup>104</sup> The *campstor* must have carried large amounts of bronze coin with him, which he may have obtained directly from the mint. It is unlikely, however, that he carried with him anything but large denominations—folles (worth

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Lydus, *On Powers* II 29, 127). See Torbatov (1997); Curta (2002); Gkoutzioukostas (2008); Gkoutzioukostas/Moniaros (2009).

100 Deligiannakis (2016), 89–90.

101 Gândilă (2016), 146.

102 Curta/Gândilă (2011–2012), 94–95.

103 Both balances and weights served for verifying the purity (and therefore value) of the metal, as gold coins were struck in different denominations (solidi, semisses, and tremisses) and in gold of different purity (20, 22, and 24 carats). For weights see Minchev (2008).

104 Asdracha (1998), 494–96. John was most likely employed in a *scrinium* of the *comes sacrarum largitionum*.

40 nummia) and half-folles (worth 20 nummia). The only way soldiers could have obtained smaller denominations, especially pentanummia (worth 5 nummia) and minimi (the smallest denominations) was at the market. However, the analysis of the distribution of coins inside the hillfort at Odărçi (near Dobrich, Bulgaria) has demonstrated that there was no market inside the fort, and that exchanges involving coins took place inside warehouses for the *annona* products.<sup>105</sup> In the absence of prices, it is impossible to assess the velocity of money, but all payments seem to have been local, without coins moving too much from one site to another.<sup>106</sup> That, at least, is the conclusion one can draw from the uniform monetary profile of the northern Balkans, characteristic of which is the predominance of higher denominations.<sup>107</sup> In that respect, the northern Balkans are in stark contrast with the monetary economy of Greece, which was dominated by small change, particularly Carthaginian nummia and Vandalic minimi, along with Constantinopolitan nummia struck for emperors of earlier centuries. This has rightly been interpreted as a sign of a healthy monetary economy dominated by a multitude of low-value transactions.<sup>108</sup> While in Greece, 22 out of 28 hoards with the latest coins struck between 491 and 565 are of minimi, such coins are rare in the northern Balkans.<sup>109</sup>

With no large-scale cultivation of crops, marketplaces or a diversified monetary mass, the world of the northern Balkans was not one of fortified villages, but one of strongholds maintained and supported by the state. Coins, in that respect, served primarily to facilitate exchanges resulting from the state-run distribution of food and goods. Hoarding, therefore, may be an indication that hoard owners hoped to leave the Balkans at some point, together with their savings, to invest in or purchase from markets elsewhere in the empire. That hilltop sites in the Balkans were in fact connected with economic networks through which small denominations of the bronze currency circulated (typically to serve urban markets) explains not only the occasional presence of minimi—a feature of the monetary economy of Greece—but also the non-retrieval of so many hoards of bronze coins. The monetary value of the bronze

105 Curta (2017a), 441–42 and 445–49.

106 For provincial circulation, see Mikhailov (2010).

107 Particularly interesting in this respect is the presence of the heavy folles struck for Justinian. See Gândilă (2012). As Gândilă (2009), 90–91 notes, the heavy folles of Justinian appeared in the Balkans long after Justinian's death and remained in circulation in the region until the last quarter of the 6th century.

108 Curta (2011c), 77–79; Gândilă (2016), 137.

109 Curta/Gândilă (2011–2012), 92. For minimi as single finds from Caričin Grad and the Carevec Hill in Veliko Tărnovo, see Curta (2017a), 443. Moreover, excavations in Gabrovo (near Veliko Tărnovo, Bulgaria) have demonstrated that 4th- and 5th-century coins were in use along with those struck for 6th-century emperors.

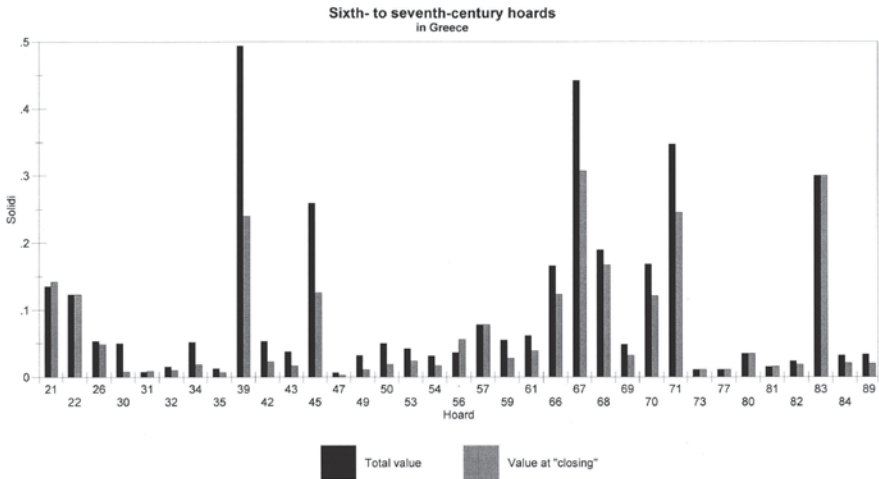


FIGURE 5 The value of 35 hoard collections from Greece, calculated on the basis of the exchange rate between gold and copper in operation at the time every one of the constituent coins was minted (Total Value), and at the time the latest coin was struck (Value at "closing"), respectively: 21—Petrochorion; 22—Boeotia; 26—Adam Zagliveriou; 30—Athens (first find of 1933); 31—Athens (second find of 1933); 32—Corinth (find of 1971); 34—Eleusis; 35—Kenchreai (find of 1963); 39—Thebes; 42—Laurion; 43—Spata; 45—Thasos (find of 1957); 47—Agios Nikolaos; 49—Mantineia; 50—Nemea (find of 1979); 53—Koutsis; 54—Megara; 56—Zogeria (find of 1995); 57—Athens (find of 1971); 59—Athens (find of 1936); 61—Agia Kyriaki; 66—Athens (find of 1908); 67—Eleusis (find of 1893); 68—Isthmia (find of 1954); 69—Kleitoria; 70—Priolithos Kalavryton; 71—Pellene (find of 1936); 73—Chalkis; 77—Pellene (find of 1982); 80—Nea Anchialos; 81—Politika-Psachna; 82—Thasos; 83—Solomos (find of 1938); 84—Thasos (find of 1979); 89—Delos

coins varied considerably throughout the 6th century, as a consequence of the variations in reckoning the follis to the solidus (as money of account) introduced by several monetary reforms. The value of a hefty collection of bronze coins could suddenly drop to almost nothing.<sup>110</sup> But most hoards were little more than a poor man's savings. None of those collections of small change was worth more than half of a solidus, often much less (Fig. 5).<sup>111</sup> Depreciation

110 Curta (2011c), 80–82 points to the considerable difference between the total value of hoard collections calculated on the basis of the exchange rate between gold and bronze in operation at the time of every one of the constituent coins, and that at the time of the latest coin.

111 For a comparison between hoards in the Balkans and prices in the empire, see Curta, (1996), 170–73. For an attempt to gauge labor wages on the basis of coin hoards, see Mikhailov (2010).

affected especially “saving hoards” buried in Greece with the latest coins struck in the late 570s or early 580s. Soon after that, there is a sharp break in coin accumulation in Greek hoards. Moreover, no hoards are known so far from Greece with latest coins struck between 585 and 605.<sup>112</sup> This, however, is precisely the period during which a relatively large number of hoards appear in the northern Balkans. The most likely explanation is that troops until then stationed in Greece were moved to the northern Balkans as part of the military campaign that Emperor Maurice launched at that time against the Slavs and the Avars. However, in the Lower Danube region, there was no large-scale production of food, the surplus of which could create the basis for the organization of marketplaces. With no peasants in villages, the soldiers in forts of the northern Balkans had to make do with the public dole. In the early 7th century, some troops returned to Greece, as suggested by a new series of hoards of bronze and gold coins. After ca. 620, however, most troops were withdrawn from the Balkans. Troops and coins were after that restricted to the coastal areas around Thessalonica, Corinth, and Athens.

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112 Curta (2011c), 84 and 94–95 with n. 19 notes that coins struck between those years are also rare as single finds.

## The Balkan “Dark Ages” (620 to ca. 680)

It has become a commonplace in historiography to blame the “Avar and Slav incursions” for the disappearance of cities in the Balkans during the 7th century. According to John Haldon, “it was the constant and regular devastation of the seventh century which hastened the end—inevitable anyway in structural terms—of the towns” in the Balkans.<sup>1</sup> Only Thessaloniki retained some importance as a center for trade, and that only with great difficulty and on a very limited basis.<sup>2</sup> Cities supposedly re-appeared in the 9th century, but, unlike their antique predecessors, they had a completely new social, economic, and administrative structure. Such ideas simply reproduce the thesis about the fundamental difference between late antique and Byzantine cities, which was put forward in the 1950s by Alexander Kazhdan, and then adopted and tweaked several times until recent years, in order to fit the general idea of discontinuity between Antiquity and the Middle Ages.<sup>3</sup> The archaeological evidence, however, does not support either that thesis, or the ideas derived from its successive adaptations. Not a single city in the Balkans was deserted because of Avar and Slav “incursions.”<sup>4</sup> On the contrary, all those that did not continue into the 7th century were abandoned at once, most likely deliberately, when the Roman army withdrew from the Balkans during Emperor Heraclius’ reign,

- 
- 1 Haldon (1997), 103 and 114. The idea that cities in the Balkans succumbed to barbarian invasions was first challenged by Howard-Johnston (1983), an article conspicuously absent from the bibliography of Haldon’s book.
  - 2 Haldon (1997), 114. According to Haldon, other cities survived as “closed fortresses,” such as Odessos, “at the mouth of the Danube,” Durostorum, and Bononia. Odessos (near present-day Varna) is some 140 miles (about 230 km) away from any mouth of the Danube. As Pletn’ov (2008), 41–86 has demonstrated, the ancient city was abandoned in the late 6th century, and medieval Varna grew nearby at a much later time; see also Pletn’ov (2014). There are no traces of a 7th-century occupation in Bononia (present-day Vidin, in northwestern Bulgaria). Finds of copper and silver coins struck for the emperors Heraklonas, Constans II, and Constantine IV, and the latter’s seal strongly suggest a Byzantine military presence in Durostorum (Silistra, in northern Bulgaria). However, there is no evidence that the ancient city still operated as a “closed fortress.” See Barnea, (1981); Oberländer-Tâmoveanu (1996), 100, 104 and 120. To be sure, Haldon’s views on the matter have evolved. To Brubaker/Haldon (2011), 536, instead of an exception, Thessaloniki appears as a “continuous” city, with a “very considerable degree of continuity in infrastructure and use of space.”
  - 3 Kazhdan (1954). For the political circumstances in which this thesis was formulated, and for its critique, see Curta (2016e), 141–62.
  - 4 Aladzhov (2016).





FIGURE 6 Principal sites mentioned in the text and in the notes (ancient names in italics)

most likely around 620. Moreover, while discontinuity is clear in the case of sites in the interior, there is clear evidence of continuity on a few coastal sites.<sup>5</sup>

The local bath in Mesembria (Nesebăr, on the Black Sea coast) was still in operation in the late 7th century, as indicated by the events of 680, when Emperor Constantine IV abandoned the campaign against the Bulgars to go to Mesembria for treating his gout in the *thermae* of the city (Fig. 6).<sup>6</sup> The Old Metropolitan church was rebuilt in the early 620s, as attested by two graffiti

5 For discontinuity on urban sites in the interior, see Velkov (1965), 33–36; Iankov (1987); Dancheva-Vasileva (2009); Topalilov (2012), 66.

6 Chimbuleva (1988); Jordanov (2014), 60.

on the eastern wall of the sanctuary, and on the western face of the southeastern pillar, respectively. Both were scratched by masons working on rebuilding the superstructure. One of them contains the date June 10, 618.<sup>7</sup> Coins of Constantine IV and Justinian II have been found in various parts of the modern city of Nesebăr, and two hoards are known, one of gold (with the latest coin struck between 681 and 685), the other of bronze coins (with the latest coin struck between 685 and 695).<sup>8</sup> This is a clear indication of continued contacts with the capital of the Empire, a conclusion substantiated by finds of Glazed White Ware, the staple import from Constantinople.<sup>9</sup> New excavations have brought to light the city's 7th-century cemetery.<sup>10</sup> Similarly, a few diagnostic finds have been published from the excavation of the 7th-century cemetery on the small island of Sv. Kirik off Sozopol, less than 17 miles (27 km) across the Bay of Burgas.<sup>11</sup>

In Thessaloniki, the surviving mosaics in the basilica of St. Demetrius honor 7th-century civic authorities as well as prominent citizens who supported the restoration of the church after a great fire and a barbarian attack.<sup>12</sup> The Church of St. Sophia in Thessaloniki was destroyed, possibly by an earthquake in the 620s, but then rebuilt on the same spot. Its impressive dome belongs to a second building phase, which has been dated by means of an inscription to 690/1.<sup>13</sup> The existence of many construction sites in the city is also betrayed by a lime kiln, apparently used for melting into lime the marble elements of ruined monuments in the forum.<sup>14</sup> That forum was preserved intact well into

7 Stanev/Zhdakov (2009).

8 Iordanov (2014), 60; Iurukova (1980); Penchev (1991).

9 Curta (2016e), 152.

10 Bozhkova et al. (2006); Kiiashkina/Marvakov/Dimova (2008); Marvakov/Giuzelev/Gospodinov (2013).

11 Daskalov (2012), 67; 234 fig. 64/2, 6, 10, 11; 235 fig. 65/4; 236 fig. 66/11. Excavations inside the city of Sozopol have revealed the Church of St. George, a large dome-in-cross church, probably built in the late 7th or early 8th century, with a rich marble ornamentation and frescoes; see Drazheva (2005), 236.

12 Robertson Brown (2010), 231. The mosaics on the northern and eastern sides of the southern apse pier show St. Demetrius between two churchmen and a state official with scepter and *mappa*, perhaps the chief benefactors of the rebuilt church. For the 7th-century mosaics, see Mentzos (2010). For the portrait of the state official, see Furlas, (2010); Gkoutzioukostas (2015); Mastora (2016).

13 Bouras (2006), 62; Kazamia-Tsernou (2009), 334–40 and 353–81. As Mavropoulou-Tsioumi (2014), 30 points out, the inscription at the base of the dome is incomplete, only the 4th indiction is legible, together with AM 6 ... This has commonly been interpreted as 690, but more recently, as 840 (AM 6349). For the 7th-century structural restoration of the Church of the Acheiropoietos, see Raptis (2017).

14 Antonaras (2017a), 113.

the 8th century, much like the city's street grid.<sup>15</sup> Nonetheless, there were many open spaces inside the city that were reserved for vegetable gardens.<sup>16</sup> Grain supplies came from the outside, and were stored both in private houses and in public granaries. A large amount of grain was sold in 676 from the public granaries to private merchants at a price of 1/7 *nomisma* per *modius* (12.8 kg), a transaction that brought the city a hefty profit of over 7,800 gold coins, the equivalent of over 700 tons of sold grain.<sup>17</sup> At least one industry was well and thriving in 7th-century Thessaloniki, as indicated by the imperial decree of 689, through which Emperor Justinian II granted all profits from the city's salt-pans to the Church of St. Demetrius in order to help with its running costs.<sup>18</sup>

In Athens, the Erechtheion was turned into a three-aisled basilica in the early 7th century, at the same time as the conversion into churches of the Temple of Hephaistos in the Agora and the Temple of Artemis Agrotera by the Ilissos.<sup>19</sup> The tetraconch in the Library of Hadrian was rebuilt as a three-aisled basilica during the second half of the 7th century, possibly for Constans II's visit of 662/3.<sup>20</sup> The old colonnade of the Stoa of Attalos was subdivided into rooms. In room 6, hundreds of terracotta roof tiles recovered from fallen debris of the house destroyed at some point in the 630s were piled in neat rows for possible re-use. These alterations have been coin-dated to the reign of Constans II.<sup>21</sup>

Although detailed archaeological evidence exists for just four cities so far, it is quite clear that at least four other urban centers established in Antiquity continued to exist in the 7th and subsequent centuries—Dyrrachium (Durrës), Zadar, Trogir, and Pola (Pula).<sup>22</sup> Mesembria, Sozopol, Thessaloniki, and Athens were central places with dependent territories and nodes in economic networks, with more or less autonomous administration responsible for such public works such as the restored Old Metropolitan church in Mesembria or the new Church of St. Sophia in Thessaloniki.<sup>23</sup> The economic base of each one of those sites appears to have been sufficiently diversified to create a surplus that could stimulate manufacturing activities and secure the participation of each site in interregional exchange systems. One only needs to think

15 Malamut (2005), 171.

16 *Miracles of St. Demetrius* II 4.252, 213; Bakirtzis (2007), 97.

17 Bakirtzis (2007), 92.

18 Nigdelis (2007).

19 Kazanaki-Lappa (2000), 200.

20 Frantz (1988), 73.

21 Shear (1973), 397.

22 For the archaeology of 7th-century Durrës, see Tartari (1984) and Bowes (2006). For Zadar and Trogir, see Jović Gazić (2011). For Pula, see Marušić (1967).

23 There were "satellite" villages around Thessaloniki. Those to the north, near Lite, produced grain and vegetables that the famished inhabitants of Thessaloniki plundered in the aftermath of the failed siege of 677 (*Miracles of St. Demetrius* II 4.280, 220).

of the salt pans in Thessaloniki, but the presence of coins and Glazed White Ware in Mesembria implies participation in interregional exchange networks. The most conspicuous feature of all those sites is the preservation of the old street grid, which suggests that in all known cases some central authority was still present that was capable to prevent encroachment into the main roads and to regulate traffic.<sup>24</sup> As Chavdar Kirilov aptly put it, cities survived where the state continued to be present or where it had control over the neighboring areas.<sup>25</sup> More importantly, all sites appear to have possessed concentrations of population, as well as social hierarchies. Perhaps the most salient position in that respect is that of Thessaloniki, the best example in the Balkans of the change that Wolf Liebeschuetz called a shift "from government by curiales to government by notables."<sup>26</sup> There were wealthy people in 7th-century Thessaloniki, who together with the local clergy and the state officials formed the social network that dominated the city.<sup>27</sup> The "notables" hid the Slavene chieftain Chatzon, and the "powerful" participated in the city government. In that capacity, they were largely responsible for the massive sale of grain that led to the famine of 677.<sup>28</sup>

Notables also played a key role in 7th-century Istria. On the basis of an early 9th-century exceptional document, the *placitum* of Rižana (804), historians have attempted to reconstruct the economic and social make-up of the Istrian peninsula during the 7th century. According to the *placitum*, some *coloni* lived in Neapolis (now Novigrad, on the western coast of Istria, Croatia), others in the countryside, but they all paid taxes (*telos*) to the state agent, the *cancelarius*, and to the tribune. The latter was typically a landowner, a member of the class of *iudices* with juridical and military powers over the hinterland of the city in which they resided.<sup>29</sup> The tribune collected the taxes and had under his command a number of *domestici*, *vicarii*, and *locoservatores*. By the late 7th century, the tribune was the most powerful person in each urban community, with the privilege of granting immunity from military requirements and taxes to free men, who relied on his protection and worked in his service

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24 Arthur (2002), 40.

25 Kirilov (2006), 98.

26 Liebeschuetz (2000), 121.

27 Whitton (1990), 24. Unlike Book I, the archbishop of Thessaloniki is not mentioned at all in Book II.

28 *Miracles of St. Demetrius* II 1.193 and II 4.281, 179 and 221; Mentzos (2006), 47–49. According to Lemerle (1981), 136, there were two kinds of aristocrats in 7th-century Thessaloniki: those who had economic power, and those who held the reins of the city government. But the author of Book II of the *Miracles of St. Demetrius* employs a single word (*kratountes*) for all of them.

29 Guillou (2014–2015), 182.

in war and in peace.<sup>30</sup> The wealth of the 7th-century elites in Istria was based on rents derived from agriculture, pastoral farming, and fishing; from service in the military and provincial administration; and from involvement in commerce and trade or production of goods.

A distribution map of all settlements known or supposed to have been in existence in the Balkans during the 7th century shows that the central part of the Peninsula is devoid of any sites whatsoever.<sup>31</sup> Unlike urban settlements that are typically on the coast, most rural settlements are located in the northern region. Garvan is on the right bank of the river Danube, just across from the Paraschiva isle, less than 25 miles (40 km) to the west from Siliistra. Zhivka Văzharova's excavations carried out between 1964 and 1980 brought to light 120 features—dwellings, kilns, and workshops.<sup>32</sup> Eleven houses and a kiln belong to what the excavator believed to be the earliest phase of occupation, which she dated to the 6th and 7th century. The absence of any datable metal finds makes it impossible to verify her chronology. Whether house 12 is of a 7th- or late 6th-century date, clay pans and handmade pottery were associated in house 59 with a fragment of combed ware thrown on a tournette, which strongly suggests a date after ca. 600.<sup>33</sup> The absence of any amphora remains or pieces of metalwork (fibulae, buckles) of Roman production or inspiration may also indicate a date later than the 6th or early 7th century.<sup>34</sup> Four houses and the kiln produced fragments of quern stones bespeaking the consumption of cereal foods. In the absence of any tools or paleobotanical samples, it is impossible to tell whether the cereals in question were cultivated locally. Five houses produced clay weights for the fishing net. Almost all houses in Garvan also produced bone or antler awls, one per each house.<sup>35</sup> Awls and skates

30 Bileta (2011), 114.

31 Curta (2013c), 213 fig. 12. A few stray finds are known from the interior, that may be dated with some degree of certainty to the 7th century. Such is the case of the pair of bow fibulae with animal decoration of the so-called Dnieper type found in Kárnare near Karlovo, at the southern end of the Troian Pass across the Stara Planina Mountains. As Daskalov/Dimitrov (1999) point out, the fibulae most likely belonged to a disturbed burial.

32 Văzharova (1986), 7–8; 9 fig. 1b and 2; 10 fig. 3. For the earliest occupation phase, see Grozdanova (2018), 22–26.

33 Văzharova (1986), 129 and 133 fig. 132. For the chronology of the pottery thrown on a tournette, see Doncheva-Petkova (1977); Stoianova (1998); Grozdanova (2018), 28–32. Another indication of a 7th-century date is the association of fragments of handmade pottery with no decoration with fragments with finger impressions or notches on the lip [as in houses 67 and 87; Văzharova (1986), 137 and 156; 139 fig. 140 157 fig. 164]. For the earliest finds of handmade pottery with finger impressions or notches on the lip, see Curta (2001c), 291 and 294.

34 Curta (2013c), 173.

35 Văzharova (1986), 84–86, 90, 99, 123, 136, 137, 182; 84 fig. 66/5; 89 fig. 73/3; 91 fig. 76/2; 99 fig. 86/4; 123 fig. 120/3; 138 fig. 138/2; 139 fig. 139/3; 139 fig. 140/1; 183 fig. 196/3.



FIGURE 7  
Garvan (Bulgaria), house 89,  
plan with selected artifacts  
from the associated assemblage:  
handmade pottery, whetstones,  
spindle whorl, and bone needle.  
Redrawn after, and with photos  
from Văzharova (1986)

such as found in houses 68 and 80 imply the raising of animals, and animal bones have been found in significant quantity in the pit in front of the oven in houses 80 and 84.<sup>36</sup> Unfortunately, no zooarchaeological study exists so far for the bone material in Garvan, so nothing is known either about the species or about the age of the animals represented in those faunal assemblages. Eight out of eleven houses dated to the 7th century also produced whetstones, which served for sharpening knives, such as found in several of those same houses.<sup>37</sup> Together with knives, whetstones, awls, and fishing net weights, the assemblages from 7th-century dwellings in Garvan included spindle whorls.<sup>38</sup> House production of (presumably) woolen textiles is also betrayed by a bone needle found in house 89 (Fig. 7).<sup>39</sup> There was a crucible in house 59, which

36 For skates, see Văzharova (1986), 140 and 153; 141 fig. 143/3; 151 fig. 156/3. For animal bones, see Văzharova (1986), 153 and 155.

37 For whetstones, see Văzharova (1986), 90, 99, 123, 128, 153, and 155; 89 fig. 73/2; 91 fig. 76/3; 99 fig. 86/5; 123 fig. 120/2; 130 fig. 128/2; 152 fig. 157/3; 154 fig. 160/6.

38 Văzharova (1986), 86, 90, 99, 123, 136, 140, 160, and 182; 84 fig. 66/3; 91 fig. 76/6; 99 fig. 86/2; 123 fig. 120/6; 138 fig. 138/5; 139 fig. 139/2; 141 fig. 143/2; 159 fig. 17/2; 183 fig. 196/2.

39 Văzharova (1986), 160 and 159 fig. 167/4.

was associated with slag.<sup>40</sup> Slag has also been found in houses 66 and 80, but no other traces of metalworking appear in any of them.<sup>41</sup>

A similar picture results from excavations carried out on the neighboring site at Popina between 1955 and 1961. Handmade pottery, including clay pans, awls, whetstones, and spindle whorls remind one of the assemblages in Garvan, but there are no weights for the fishing net that could be dated, with any degree of certainty to the 7th century. At least one of the few houses that could be dated to that century has not one, but three ovens (one of stone and two of clay), which suggests more than one phase of occupation, with possible repairs and modifications.<sup>42</sup> There were many animal bones in a pit inside that house, but no specific details about species and age are known. In house 10, a rectangular pit by the southern side contained no less than eight whetstones, and eight awls have been collected from the floor of the building, which may well have been a workshop (Fig. 8).<sup>43</sup> A platform paved with stones to the north from the oven of another house may be interpreted as a working area, but no tools have been found in the associated assemblage.<sup>44</sup>

Farther to the west, the site at Mihajlovac (near Negotin, eastern Serbia) is located across the Danube from the island of Ostrovu Mare. The salvage excavations of 1981 and 1982 uncovered 4,100 square feet of land and unearthed eight features, all dwellings. The associated assemblages are made up of both hand- and wheel-made pottery.<sup>45</sup> The former includes a fragment of a clay pan, while the latter is represented by such things as a lid and a fragment of an amphora, both suggesting a late 6th- or early 7th-century date. There were clay weights for the fishing net in the houses excavated in Mihajlovac, much like in Garvan. However, unlike Garvan and Popina, where no weapons have been found, no less than three battle axes are known from Mihajlovac. All three have good parallels in Avar-age, 7th-century assemblages.<sup>46</sup> The imprint of a cereal seed (millet?) on the bottom of a handmade pot suggests the local cultivation of crops.

The 1977 rescue excavations on the western side of the Ostrovu Mare island revealed a number of features, some of which have been wrongly interpreted as cremation burials (but are more likely sunken-floored buildings). Only one house has been published, as well as the pottery remains from the

40 Vāzharova (1986), 129 and 133 fig. 132/7, 9.

41 Vāzharova (1986), 136 and 153.

42 Vāzharova (1965), 12–14; 13 fig. 3.

43 Vāzharova (1965), 26; 27 fig. 13/3; 28 fig. 14/3.

44 Vāzharova (1965), 30.

45 Janković (1986), 443–44; 445 fig. 1; 446 fig. 2.

46 Curta (2013c), 177 with n. 178.



FIGURE 8

Popina (Bulgaria), house 10, plan with selected artifacts from the associated assemblage: whetstones, awls, and spindle whorl. Redrawn after, and with photos from Văzharova (1965)

excavation—both handmade pottery and combed ware thrown on a tournette. There is no direct evidence of a 7th-century date, but the cremation cemetery at Balta Verde, which was certainly in use during that century is located on the opposite bank of the Dunărea Mică.<sup>47</sup>

Archaeological excavations carried out between 1995 and 2008 along the route of the highway segment between Celja and Lendava (central and eastern Slovenia, respectively) have brought to light a relatively large number of settlement sites in the valley of the river Mura (part of the region known in Slovenia as Prekmurje), south of present-day Murska Sobota.<sup>48</sup> Simultaneously, salvage and systematic excavations have brought to light many more sites in northern

47 Stîngă (1978), 123; 120 fig. 6; and 122 fig. 8; Boroneanț/Stîngă (1978), 87 and 89; 88 fig. 1. For the cemetery at Balta Verde, see Berciu/Comșa, (1956), 403–05.

48 Kerman (2011); Guštin/Tomaž (2017); Cipot (2010).



Croatia, along the southern bank of the Drava (the region known in Croatia as Podravina), both upstream and downstream from its confluence with the Mura.<sup>49</sup> Many of those sites have been dated to the early Middle Ages by means of the associated pottery and a relatively large number of radiocarbon dates. The largest number of such dates are from charcoal samples collected in Nova Tabla, a site located only 2 km to the south from Murska Sobota, on the shore of Lake Soboska. More than half (55.6 percent) of all dates concern the earliest phase of occupation of the site, features of which cluster in the central part of the excavated area.<sup>50</sup> Most calibrated dates point to a 7th-century date for the first occupation phase of the settlement.<sup>51</sup>

Dašenka Cipot's 2003 rescue excavations in Popava (near Lipovci, to the southeast from Murska Sobota) discovered 41 refuse pits. Given that cremated human bones have been found in its filling, it remains unclear whether SE7/SE24 was a settlement feature. At any rate, the filling produced remains of combed ware thrown on a tournette and handmade pottery, including a fragment of a clay pan. In addition, there was a golden earring with grape-shaped pendants, with good analogies dated to the 7th century. The radiocarbon date for the assemblage is BP 1445 ± 24 (1σ cal. AD 602–642, 68.3% probability; 2σ cal. AD 572–649, 95.4% probability).<sup>52</sup> Farther to the southeast, Luka Bekić's excavations in Nedelišće, near Čakovec (to the north from the river Drava, near the Slovenian-Croatian-Hungarian border) brought to light another 7th-century settlement. Two settlement features have been radiocarbon dated, one to 616 ± 21, the other to 649 ± 7.<sup>53</sup> The assemblage associated with the latter included both handmade pottery and pottery thrown on a tournette with combed decoration, as well as whetstones and spindle whorls. There were cattle bones in the assemblage, in addition to a cattle bell.<sup>54</sup> Even farther to the southeast in the Podravina, recent excavations on the northern side of the village of Torčec (near Koprivnica, northern Croatia) have brought to light a sunken-floored building with a ceramic assemblage that includes clay pans, as

49 Ivančan (2010); Bekić (2016).

50 According to Pavlović (2017), 353, the charcoal samples have been taken from 34 out of 193 settlement features discovered at Nova Tabla. For the cluster of early features in the center of the excavated area, see Pavlović (2012), 324 fig. 4; 326 fig. 7.

51 Curta (2018), 84.

52 Cipot (2008), 59 with fig. 1; 40 fig. 4; Šavel (2008), 66–67; 67 fig. 5; 68 figs. 7–14. For 7th-century analogies for the earring, see Curta (2013c), 180 with n. 192.

53 Bekić (2012), 4 and 7; 8 pl. 1; 9 pl. 2; 11 pl. 4; Bekić (2013), 241–42; 241 fig. 1.

54 Bekić (2016), 55, 57, and 204–207; 114 fig. 72; 120 fig. 78; 130 fig. 86; 132 fig. 90; 268 pl. 55; 269 pl. 56; 270 pl. 57; 271 pl. 58; 272 pl. 59.

well as handmade pottery and pottery thrown on a tournette. The radiocarbon dates for that assemblage are 558–638.<sup>55</sup>

The settlements excavated in Prekmurje were established in an area with poor water permeable gleysols at the very edge of the Mura River fan. Unlike most of them, Nova Tabla is located at the very heart of the gravelly Mura fan, where surface water was very rare, and one had to rely exclusively on the Dobel Creek.<sup>56</sup> This was definitely not an environment conducive for agriculture: the soil is very poor in nutrients, and the lack of water made life on the gravelly fan very difficult. It is therefore unlikely that the settlement in Nova Tabla was permanent or durable. As a matter of fact, very few fireplaces have been found inside the features excavated in Nova Tabla, and their function as dwellings has therefore been questioned.<sup>57</sup> Nor can the inhabitants of the Nova Tabla settlement be envisioned as cultivating any crops in the nearby fields. No material correlates of agricultural activities have been found in Nova Tabla—no quern stones, no silos, and no agricultural tools.<sup>58</sup> In several cases, there were animal bones in the fill, but without a zooarchaeological study, it is difficult to assess their significance. Nonetheless, it should be noted that the Mura River fan edges were most likely rich in grass, which suggests that the main subsistence strategy of the communities established in Nova Tabla and in the environs was livestock farming, not the cultivation of crops.<sup>59</sup> If so, then the settlement at Nova Tabla was one of pastoralists, perhaps one of the groups that had entered the Carpathian Basin with or in the wake of the Avars. This is further substantiated by occasional finds of Avar-age artifacts, such as the (belt) mount from a refuse pit, which bears some analogy with specimens known from several burial sites in Hungary that are dated to the first half of the 7th century.<sup>60</sup> The 7th-century settlements in Prekmurje and Podravina may therefore be regarded as the southernmost component of the economic system organized inside the Carpathian Basin (to be discussed in chapter 11).<sup>61</sup> By contrast, the earliest rural settlements on the right bank of the Danube—Garvan, Popina, and Mihajlovac—represent an archaeological novelty. Those

55 Ivančan (2010), 47–48 and 75 fig. 79; 253 pl. 33; 254 pl. 34; 255 pl. 35; 256 pl. 26; 257 p. 37.

56 Magdič (2017), 446 with fig. 4.

57 Pavlović (2012), 325.

58 According to Pavlović (2013), 453–54, the only indication of consumption of cereal foods is the fragment of a quern stone found in feature 50 108.

59 Magdič (2017), 447 and 454. Such a conclusion is strengthened by the bone assemblage from the house discovered in Nedelišće, and the associated cattle bell.

60 Guštin (2008), 54 with figs. 2–5.

61 Trough-like settlement features such as discovered in Nova Tabla and other sites northern Croatia are known from Avar-age settlements in the Carpathian Basin. See Milo (2014), 49–56; Stanciu (2017), 62–68.

are in fact the first open, non-fortified settlements in the Balkans in more than 150 years. Moreover, the economic profile of the small communities living in those villages is different from those in Prekmurje and Podravina, but similar to the model of “itinerant agriculture” advanced for the lands north of the river Danube in the 6th century (see chapter 7).<sup>62</sup> Although they most likely relied on the cultivation of crops, those people also raised animals and practiced fishing by means of cast nets. Those were self-sufficient, small communities living in what in the early 7th century must have been the borderlands of the Avar qaganate and its sphere of influence. That such settlements have so far not been found in the rich agricultural lands between the Drava and the Sava rivers, or across the Stara Planina Mountains, in Thrace, strongly suggests that the expansion of rural communities into the borderlands of the qaganate was under the control of the Avar elites. According to Theophanes, when the Bulgars crossed the Danube in 681, they subdued the Slavic tribes in the area of “Varna, as it is called, near Odysos and the inland territory that is there.” They then resettled two of those tribes—the Severeis along the frontier with the Empire, and the “so-called Seven Tribes” on the frontier with the Avars.<sup>63</sup> Whether or not they can be in any way associated with those tribes, the rural settlements at Popina and Garvan are the only archaeological evidence that, outside coastal cities such as Mesembria (Nesebăr), the Bulgarian lands in the northern Balkans were inhabited at all before the Bulgar migration.

A distribution map of all isolated burials and cemeteries dated with some degree of certainty to the 7th century shows a clear cluster of sites on the northern boundary of the Balkans, which is directly comparable to that of rural settlements.<sup>64</sup> However, unlike settlements, cemeteries and isolated burials appear in great numbers along the western coast of the Peninsula, from the Peloponnese to Istria, with a prominent cluster in northern Albania. In Macedonia, burial assemblages are typically associated with ruins of old churches.<sup>65</sup> For example, at Sv. Erazmo, on the northern shore of Lake Ohrid, there were 124 graves inside and outside the ruins of a 6th-century basilica.

62 Curta (2001c), 276 with n. 57. Much like in the lands north of the river Danube, no parts of plows have been found on any 7th-century site in the northern Balkans, even though the consumption (and perhaps cultivation) of cereals is betrayed by finds of querns and the occasional inclusion of cereal seeds in the fabric of the local handmade pottery.

63 Theophanes Confessor, *Chronographia*, 359; trans. 499. See also Beshevliev (1967); Pletn'ov (2008), 103–108; Pletn'ov (2011).

64 Curta (2013c), 214 fig. 13.

65 At Shurdhah, in Albania, graves were placed on the southern side and around the apse of a church; see Spahiu and Komata (1974), 316. In Šas (near Ulcinj, in Montenegro), two burial chambers were found next to the church of the Holy Virgin; see Janković (2007), 27 and 29–32; 26 fig. 11; 30 figs. 17–18; 31 fig. 19.

Some cut through the mosaic pavement in the nave, others were directly on top of the mosaic pavement. The earliest graves cluster in the southern aisle and are dated to the 7th century by means of such diagnostic artifacts as fibulae with bent stem, earrings with star-shaped pendant, torcs, and semicircular pendants with open-work ornament. Later graves dated to the early 9th century appear in the nave and in the northern apse.<sup>66</sup> Seventh-century burials, some of them with weapons, are also known from Athens and Corinth.<sup>67</sup> In one of them, an agricultural implement (mattock) was deposited next to a lance head, two arrowheads, and a belt buckle.<sup>68</sup> Weapons have also been found in several cemeteries in northern Albania—swords, arrow and lance heads, and battle-axes.<sup>69</sup> But the Albanian cemeteries also produced evidence of continuity of late antique practices.<sup>70</sup> For example, a significant number of graves in the large cemetery excavated in Kruje (north of Tirana) produced wheel-made jugs, some with painted ornaments resembling late 5th- to early 7th-century pottery from southern Italy.<sup>71</sup> Even more interesting is the deposition of old artifacts (such as the 4th-century crossbow brooch from grave 6 in Kruje) and the (secondary) burial in prehistoric mounds (as in Klos, central Albania). Such practices point to concerns with connecting with the past, a phenomenon documented on several sites in southeastern Albania and northern Greece during the 8th and 9th centuries (see chapter 20).<sup>72</sup> Equally significant is the homogeneity of the burial rites. From southern Greece to Istria, 7th-century cemeteries in the western Balkans may be easily distinguished from others by means of a few specific traits: stone or brick cists; furnished burial; the occasional

66 Malenko (1976), 222 and 232–34; 223 fig. 2; 224 fig. 3; 231 fig. 13; 234 fig. 14; Malenko (1985), 288–89 and pls. v–xiii; Babić (1995), 161; Maneva (2006); Filiposki (2010).

67 Travlos and Frantz (1965); Ivison (1996). For burials in 7th-century Greece, see also Curta (2016c).

68 Davidson (1937), 230 and 232; 231 fig. 2J.

69 Degrand (1901), p. 264; Nopcsa (1912), 198 fig. 85; Anamali/Spahiu (1963), 17 fig. 6; 19 fig. 8/1, 2, 4 and 21 fig. 7; Spahiu (1964), 78 fig.; Anamali (1971), 217; pl. I/1, 3; II/2; III/6; VII/1–3; XI/4; XIV/6; XV/8; Kurti (1971), 269 with pl. I; Anamali/Spahiu, (1979–1980), 54; Spahiu (1979–1980), 29–30 and 37–38; 38 fig. 9; pls. I/4; II/1, 2, 7; II/4, 12, 13; IV/2, 4, 6, 10, 12; V/4, 5, 11, 12, 14, 16, 17; Doda (1989), 149 and 150; 170 pl. VII/1–7; 173 pl. X/3, 6, 9, 10. See also Agolli (2006) and Bowden (2014), 353 and 354–55.

70 Nallbani (2004a); Curta (2013b).

71 Anamali/Spahiu (1963), 23 pl. v/3–4, 6, 9–11; 26 pl. VI/1, 3–12; 27 fig. 9; 28 fig. 10; Arthur (1998); Arthur/Patterson (1998), 517. One-handled, small jugs with painted ornament also appear in 7th-century assemblages in the Crimea and in Crete.

72 Anamali/Spahiu (1963), 34 fig. 13; Kurti (1971). See also Nallbani (2003), 115; Nallbani (2006); Nallbani (2007), 59–60; Curta (2016d).

deposition of weapons;<sup>73</sup> the use of cenotaphs and of multiple burials; the west-east grave orientation; and stark gender differentiation.<sup>74</sup>

Next to nothing is known about the associated settlements, which makes it very difficult to interpret the social differentiation visible in burial assemblages. Were weapons deposited in graves the material culture correlate of a military posturing associated with fortified settlements, such as Shurdhah (now on an island in the middle of the river Drin, to the east from Shkodër, in northern Albania)?<sup>75</sup> Recent research at Koman suggests that the settlement, which was established in Late Antiquity, grew largely during the 7th century judging by the expansion of the cemeteries.<sup>76</sup> Was 7th-century Koman (and other similar high-altitude sites in northern Albania) the “heir” of the 6th-century forts in the region? If so, why were they not evacuated just as the other forts in the Balkans?<sup>77</sup> There are currently no plausible answers to those questions. Because of the absence of systematic excavations of settlements, nothing is known about the economic profile of communities in the western Balkans. Very few agricultural tools were deposited in graves and no animal bones have been found in cemeteries excavated in Greece, Albania, Montenegro, and Croatia.<sup>78</sup> That many isolated burials and cemeteries were associated either with ruins of old basilicas or with operational churches suggests that those

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73 Weapon burials appear in Istria as well. See Marušić (1967), 337 and 342 pl. 111/4; Marušić (1984), 35 pl. VI/6; Torcellan (1986), pp. 64, 72–74, and 77; pl. 9/8; pl. 11/3, 4; pl. 25/10; pl. 26/9, 10, 12, 13; pl. 28/4, 8, 11; pl. 32/13. For 7th-century cemeteries in Istria and their relations to (fortified) settlements, see Miclaus (2002).

74 Nallbani (2004b), 487.

75 Spahiu/Komata (1974); Karaiskaj (1989).

76 Nallbani (2017), 339–40. Nallbani suggests that responsible for the population growth were refugees from the northern parts of the Balkan Peninsula.

77 Elsewhere in the Balkans, forts that continued to be occupied into the 7th century are located only in coastal areas. For example, the second occupation phase inside the fort at Dokos—an islet in the Argolid Bay—is coin-dated to the reigns of Constans II and Constantine IV. According to Kyrou (1995), 113, the Church of St. John the Theologian and the adjacent cemetery with cist graves must be attributed to that phase, but no further details exist either about the building or about the graves. At Isthmia, a group of rooms in the northwestern corner of the Bath have been built in rough masonry. One of them had a cooking hearth, another had an apsidal structure at the south end. The associated quern stones bespeak the rural character of the occupation. See Gregory (1993a). The ceramic material from those rooms is similar to that found on the southern side of the northeastern gate together with a coin struck for Constans II in 655/6. See Gregory (1993b), 41, 85, and 123.

78 A couple of billknives are known from Komani, for which see Ippen (1907), 17 fig. 26/11; Spahiu (1971), pl. 11/4. For billknives and mattocks from Shurdhah, which have been tentatively dated to the 7th and 8th centuries, see Spahiu (1976), pl. VI11/1–3.

were Christian communities, but without the corresponding settlements it is not possible to assess the role of Christianity in social practices.

Finger-rings with Greek inscriptions have also been found, and they suggest that the population that buried its dead in those cemeteries was in some way associated with or, at least, maintained close ties to the Empire.<sup>79</sup> However, there is very little evidence of commercial ties with the eastern Mediterranean, even on the Dalmatian coast.<sup>80</sup> At Lezhë, the chemical analysis of 18 beads from several 7th-century burials shows a natron-type base glass with elevated levels of lead and iron. The wound beads from Lezhë were most likely manufactured locally, for their chemical make-up (especially the significant presence of iron and lead) is notably different from contemporaneous Merovingian examples that have typically lower lead contents. This strongly suggests the existence of local production centers following a common manufacturing technique that made use of iron and lead oxides or metallurgical scrap.<sup>81</sup>

Coin finds may shed some light on commercial exchanges. The numismatic evidence, however, strongly suggests that after ca. 620, the Balkans entered a relatively long period of political instability and sharp demographic decline. Most gold and silver coins struck for Emperor Heraclius after 620 have been found in the north and in the valley of the river Morava, while bronze coins appear on coastal sites.<sup>82</sup> The record for the reign of Constans II, Heraclius' grandson, is radically different. There are many more bronze than either gold or silver coins struck between 641 and 668. All silver and most of the gold coins have been found in the Dobruđja. As for bronze, the difference between coins struck for Constans II and those struck for his grandfather is considerable. Over 900 specimens of the former are known from Athens and Corinth alone, although such coins also appear on sites on the eastern and especially the western coast of the Balkan Peninsula.<sup>83</sup> Almost all those coins are folles struck in Constantinople. Both the surge in the number of coins and the peculiar distribution of finds have been explained in terms of the presence of the imperial fleet in Greece during Constans II's visit on his way to Sicily, in the

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79 Spahiu (1993).

80 For finds of the latest variant of the Phocaean form 10 (dated to the mid-7th century) from Split, see Dvoržak Schrunck (1996), 285. According to Ferluga (1993), 452 the 7th century witnessed a "diminution, not interruption" of commercial exchanges across the Mediterranean.

81 The iron and lead contents of the Lezhë beads are close to the so-called Slavic potash rich high lead glasses, whereas they are clearly distinct from other medieval central European lead glasses; see Neri/Gratuze/Schibille (2018), 2, 4, 8, and 10.

82 Curta (2014), 58 and 88 fig. 1.

83 Curta (2005a), 118; Curta (2014), 89 fig. 2.

early 660s.<sup>84</sup> The large number of copper coins indicates the existence in Athens and Corinth of local markets of low-price commodities, such as food in small quantities, serving a population that had access to both low-value coinage and sea lanes linking Greece to Constantinople.<sup>85</sup> It has been suggested that those were the oarsmen or the sailors of the imperial navy. Such troops could rely on constant supplies of fresh food at certain points along the coast, but exactly where and how that food was produced in sufficiently large quantities to be sold on the market remains unknown. At any rate, such markets may have opened to monetary exchanges only upon demand. Only 30 coins of Emperor Constantine IV are known from Athens, a small fraction of the total number of coins struck for Constans II that have been found on the site. Without the presence of the imperial court and fleet, Athens was just as isolated as the communities that buried their dead in northern Albania.

- 84 Hendy (1985), 662. While the emperor's stay in Athens must have been a major event, Constans II's portrait also appears on one of the five control stamps on the back of a silver plate found in Rakhovica (near Sevlievo, northern Bulgaria). The stamp represents Constans II and his son, the future emperor Constantine IV. As such, the stamp must be dated between 659 and 668, which is also the date for the plate. See Gerasimov (1966), 218–219; 217 figs. 3–4. It is difficult to explain the presence of this piece of Byzantine silverware so far to the north, especially in the absence of any contextual information. However, it is possibly that the plate reached northern Bulgaria somewhat later, perhaps under the reign of Constantine IV, under the guise of a gift for a Bulgar chieftain.
- 85 In Greece, most single finds of coins struck after 630 and before 711 have been found on sites located immediately on the coast or at a short distance from it, as well as on nearby islands. A Byzantine presence only in the coastal region in eastern Greece and on some islands in the Aegean is further substantiated by finds of seals. Among the few that can be dated with any degree of certainty to the 7th century, only one is known from Athens, and another from Chinitisa (an islet in the Argolid Bay). See Curta (2014), 92 fig. 5; Avramea (1996), 20; Koltsida-Makri (2011), 251.

## A Periphery without “Dark Ages”: Crimea

According to the story of the holy fathers and bishops of Chersonesus preserved in Old Church Slavonic translation in the late 10th- or early 11th-century manuscript known as Codex Suprasliensis (or Retkov Miscellany), Aitherios, the missionary whom Ermon, Patriarch of Jerusalem (283–314) sent in the early 4th century to Chersonesus to turn its inhabitants to Christianity never reached that city. Due to adverse winds, his ship landed instead on an island named Alsos, “in the region of the river Dnieper,” where Aitherios fell ill and died. Later, the Chersonites erected a column on his tomb to commemorate one of their first seven bishops.<sup>1</sup> The legend of the seven bishops of Chersonesus was most likely compiled in Chersonesus in the 7th century on the basis of independent texts, one of which was the now lost *vita* of St. Aitherios. That the island of Alsos is mentioned in both the Greek and the Old Church Slavonic versions of the legend has been interpreted as an indication that even in the 7th century, the inhabitants of Chersonesus were familiar with the geography of the northern coast of the Black Sea, particularly with the estuary of the Dnieper.<sup>2</sup> That interpretation is based in fact on a much later source, the treatise *On the Administration of the Empire* attributed to Emperor Constantine VII Porphyrogenitus, according to which “from the Dnieper river to Cherson is 300 miles, and between are marshes and harbours, in which the Chersonites work the salt.”<sup>3</sup> In fact, the rhetorically elaborate text of the legend of the seven bishops of Chersonesus may have drawn from literary sources, not from contemporary concerns with the geography of the Dnieper estuary in the 6th or 7th century. Moreover, in Antiquity, the Chersonites extracted salt from much closer sources, namely the beds in the northwestern part of the Herakleian Peninsula, the triangular headland on the southwestern coast of

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- 1 *Codex Suprasliensis*, 539. The information is on folio 270r available at <http://suprasliensis.obdurodon.org/pages/supr270r.html> (visit of August 21, 2020). For the date of the Codex Suprasliensis, see Boiadzhiev/Krästev (2012). The same story (but with no mention of the river Dnieper) appears in an imperial menologium dated to the reign of Michael IV (1034–1041). See *Menologium*, 200–201; Albrecht (2012), 124 and 135.
  - 2 Sorochan (2013), 204. The island is mentioned in Strabo, *Geography* VII 3 and may have been (part of) what is now the Kinburn Peninsula between the Dnieper-Bug estuary and the Bay of Yahorlyk.
  - 3 Constantine Porphyrogenitus, *De administrando imperio* 42, 186 (Greek) and 187 (English translation).





FIGURE 9 Principal sites mentioned in the text and in the notes (ancient names in italics)

the Crimea, where the city of Chersonesus was located (Fig. 9).<sup>4</sup> However, there is more than meets the eye to the history of Aitherios and the Alsos island.<sup>5</sup>

Archaeological sources suggest that during the 6th and 7th centuries, Chersonesus was a major center for the commercialization of salted fish and fish sauce (*garum*). Both were products of a flourishing fishing industry, which relied primarily on the biannual migration of large shoals of anchovies to the shallow coastal areas in the northern Black Sea region, where the rivers Dnieper and Don brought fresh water to the sea.<sup>6</sup> Chersonesus was definitely not the only center of the fishing industry which experienced something of a boom in the 6th century. In Bosphorus (Pantikapaion, present-day Kerch), the fishermen and the traders of fish and *garum* lived not far from the port, at the foot of Mount Mitridat. The excavations carried out there in 2007 and 2008 brought to light three houses of fishmongers, one of which had a fish-salting

4 Čechová (2014), 230. According to Soročan (2013), 205, the salt pans in the western part of the Heracles Peninsula produced over 2,200 tons of salt annually.

5 For the historiography of 6th- to 7th-century Chersonesus and the Crimea, see Jastrzębowska (2001; Ushakov (2013); Khrushkova (2017).

6 European anchovies in the Black Sea migrate in the summer to the north, especially to the shallow waters of the Sea of Azov, to feed and to breed, and then return to the deep waters in the winter.

cistern.<sup>7</sup> Eight such cisterns have also been found at Tiritake, a rural settlement about seven miles south of Bosphorus.<sup>8</sup> Each of those cisterns was 102 cubic meters (about 641 barrels) large, but typically shallow, and therefore meant for the salting of large and expensive fish—sturgeon, mullet, kalkan (Black Sea turbot), or zander.<sup>9</sup> By contrast, the fish-salting vats in Chersonesus were deep (as much as three meters), and of much smaller capacity, between 25 and 30 cubic meters (157–189 barrels).<sup>10</sup> As a consequence, those installations were not for salting the fish, but for producing fish sauce (*garum*) on the basis of anchovies, as confirmed by bones found on the bottom of many vats.<sup>11</sup> Out of all 101 vats so far known from Chersonesus, only 19 percent may be certainly dated to the late 6th or early 7th century, but fish-salting cisterns continued to be built in the city through the 10th century.<sup>12</sup> The production of fish sauce (and salted fish) had two annual cycles, which depended upon the fishing seasons (Fall and Spring). Given that 1 cubic meter of fish weighed between 0.8 and 0.9 tons, the estimated production of salted fish per year was between 1,240 and 1,590 tons.<sup>13</sup> Such figures are of course estimates based on the number of fish salting vats known so far as having been in operation during the 6th and 7th centuries, but it is important to remember that only about a third of the ancient city of Chersonesus has been excavated, and that the number of vats in existence may have therefore been considerably larger. At any rate, even the current estimates suggest a massive involvement of the local population in

7 Aibabin (2013), 60; and Aibabin (2019). For another fish-salting facility discovered during the 2007–2009 excavations on the opposite side of Mount Mitridat, on the site of the modern museum of history and archaeology, see Zin’ko/Zin’ko (2017). See also Aibabin (2017).

8 Marti (1941). For Tiritake in the 6th and 7th centuries, see also Sazanov (2004); Zin’ko (2008).

9 Romanchuk (2005), 102–103. Each vat in Tiritake produced between 88 and 90 tons of salted fish.

10 Romanchuk (2005), 103; Čechová (2014), 230. Kroll (2010), 66 notes that fishbones found in 6th- to 7th-century assemblages from the southern part of Chersonesus indicate local consumption. Those were very different species than those targeted by the fishing industry—brill, thornback ray, sturgeons.

11 Čechová (2014), 231.

12 Most vats built in the 6th century were located on the southern side of the city, in the area of the ancient theatre. See Romanchuk (1977), 19 and 26; Aibabin/Zaseckaia (2003), 49–50; Sorochan (2013), 204 with n. 12 (vats 6, 30–33, 52, 55, 56, 68, 69, 72, 76, 92, and 97–101). Some vats were dated on the basis of bricks with monograms employed in the construction, others on the basis of coins or artifacts found in the filling. See Romanchuk (1973). For late 6th- and early 7th-century deposits in the fillings of the fish-salting vats in Chersonesus, see Golofast (2007) and Sazanov (2014).

13 For a somewhat lower estimate (1,091 tons), based on a smaller number of vats presumably in operation during the 6th and 7th century, see Aibabin/Zaseckaia (2003), 50.

both fishing and fish-salting industry.<sup>14</sup> This production was definitely meant for the market in Constantinople and beyond, and not for local consumption.<sup>15</sup> As late as 655, in one of his letters sent from exile, Pope Martin I (649–655) mentioned salt in the context of ships coming into the harbor of Chersonesus with cargoes of grain.<sup>16</sup> The ships that carried the grain to Crimea most likely returned with cargoes of salt.

There is no cluster of vats in any particular area, but they are instead scattered across the city, each built next to a private residence.<sup>17</sup> In the absence of written sources, nothing is known about the social organization of production. However, the distribution of vats in the city suggests that the fishing and fish salting industry was a family business. Free members of the family may have been involved, along with hired workers and slaves. At any rate, the fact that after a while vats were backfilled cannot be interpreted as an indication that any such “family firm” went out of business, for in all known cases, the reason for backfilling seems to have been to make room for new buildings.<sup>18</sup> As a matter of fact, the 6th century, particularly its second half, as well as the early decades of the 7th century saw a building boom in Chersonesus.<sup>19</sup> The development of fishing and the fish salting industry must have stimulated

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- 14 Sorochan (2013), 207. To fill one vat completely, one needed the catch from about 30 boats, each manned by two or three persons. According to Romanchuk (2005), 106, to fill a vat, a single person needed 80 to 90 days of labor.
- 15 According to Sorochan (2013), 205, the annual production was worth some 7,000 gold coins. Albrecht (2016), p. 359 suggests that the Chersonite trade with *garum* for Constantinople took advantage of the interruption of deliveries from Spain during the 6th century. On the other hand, the demand from troops stationed in the region cannot have been that important, given that, unlike the Balkans, the number of armed forces in the Crimea remained relatively small, even after the creation of the office of duke of Chersonesus during the last third of the 6th century. See Sorochan (2014); Sorochan (2008); Khrapunov (2011).
- 16 *Narrationes*, 226 (Latin) and 227 (English translation). Martin's letters survive only in the 9th-century Latin translation from Greek by the papal librarian Anastasius Bibliothecarius. See also Borodin (1991), 179; and Neil (2010), 181. For Pope Martin I's exile in Chersonesus, see also Shestakov (1908); Sorochan (2004); Domanovskii (2016).
- 17 Romanchuk, *Studien*, p. 103.
- 18 Čechová, “Fish products”, p. 231.
- 19 Romanchuk (2006); but see Romanchuk (2018). No less than 10 basilicas were built in Chersonesus during the 6th and 7th centuries. See Beliaev (1989); Biernacki/Klenina, (2006). The idea of a “building boom” in late 6th- and early 7th-century Chersonesus has been rejected by Biernacki (2009), 145–46 on the basis of the chronology of the architectural elements and details in the basilicas dated to that period.

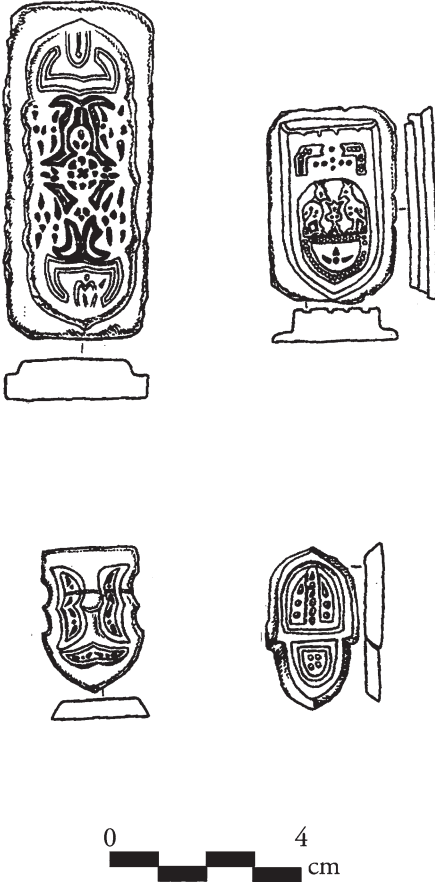


FIGURE 10  
Cherson(esus), dies for the production of  
belt mounts. Redrawn after Aibabin (1982a)

the growth of a number of other crafts, but the archaeological evidence for that is so far meager.<sup>20</sup>

Crucibles, slag, casting moulds, and dies have been discovered between 1910 and 1912 in two buildings (X1 and 26) of district III in the northeastern part of the city (Fig. 10).<sup>21</sup> A glass-working shop signaled by finds of testing droplets and slag is known from districts XXV and XXVIII in the northern part

20 Sorochan /Zubar'/Marchenko (2006), 153 even claimed (wrongly) that no workshops have so far been found in Chersonesus that could be dated between the 5th and the 7th century.

21 Aibabin (1982a). The dies imply the use of snarling, as in the case of similar finds from the Balkans (see chapter 3). The earliest casting moulds from medieval Cherson cannot be dated before the second half of the 7th century; see Aibabin (2010), 417 and 413 fig. 8/11. Nonetheless, both local imitations of the Udine Planis-type fibulae and belt buckles with eagle-headed, rectangular plates were produced by lost-wax casting. Apparently,

of the city.<sup>22</sup> Exactly what was produced in that workshop remains unknown, but some have argued that all stemmed goblets found in 6th- and 7th-century assemblages in Chersonesus have been brought to the city from elsewhere in the Empire.<sup>23</sup> The same cannot be true for the entirety of the enormous quantity of ceramic material resulting from excavations in the city and dated to that same period, even though no kiln has so far been found in Chersonesus that could be compared to those known from the Balkans (see chapter 3).<sup>24</sup> Most slipped wares in use in Chersonesus during the first three quarters of the 6th century came from workshops in the Black Sea region, the exact location of which remains unknown.<sup>25</sup> Beginning with the last quarter of the 6th and throughout the first half of the 7th century, the dominant tableware in the city were the Phocaean Red Slip (PRS) and African Red Slip (ARS) wares.<sup>26</sup> All three ceramic categories appear also in Bosphorus (Kerch), Phanagoria (near Sennoi, on the eastern shore of the Taman Bay), and on several rural settlements in the Kerch Peninsula (Zolotoe Vostochnoe, Zelenyi Mys, Tiritake, Zenonov Chersonesos, Ilyraton, Il'ichevka, and Kepoi).<sup>27</sup> Their development and chronological relations are very similar to those established on the basis of the detailed study of ceramic assemblages from Chersonesus, which suggests that, unlike the Balkans, the demand for fine pottery was not restricted to urban areas. Moreover, the commercial trends in the late 6th and early 7th

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one single jeweler was responsible for their production; see Shablavina (2007) and Shablavina (2005).

- 22 Aibabin/Zaseckaia (2003), 49; Sedikova/Iashaeva (2004), 35; Sorochan (2013), 215–16. The great number of glass pitchers and beakers found in burial assemblages throughout the Peninsula—in the hinterland of Chersonesus (Sakharna Golivka, in the interior (Bakla and Skalyste, near Bakhchesarai) or on the southern coast (Suuk Su, near Hurzuf)—are very likely of local production. See Borisova (1959), 187 and fig. 10; Veimarn/Aibabin (1993), 6 with 8 fig. 3/8; 39 with 38 fig. 22/23; 41 with 44 fig. 26/2; 68 with fig. 45/1; 95 with 94 fig. 66/24; Aibabin/Iurochkin (1995), 130 and 235 fig. 30/4; Repnikov (1907), 117. Glass pitchers and jars are also known from Kerch and may have also been produced locally, but whether in Pantikapaion or in Chersonesus remains a question without answer. See Shkorpil (1913), 18–21; Zaseckaia (1997), 447–48 and 474 fig. 18/9–11. Only chemical analyses and hopefully the discovery of more glass-working shops may clarify the problem.
- 23 Golofast (2001) and Golofast (2009), 315.
- 24 Several 6th- to 7th-century kilns are known from eastern Crimea (Kerch and Il'ichevka) and the Taman Peninsula (Phanagoria). See Ivashchenko (1997), 74 and 75 figs. 1–2.
- 25 Those were the so-called Pontic Red Slip wares of form 7, for which see Ushakov (2015), 66 and 68 fig. 2/2, 3.
- 26 Romanchuk/Sazanov (1991). For PRS in Chersonesus, see Golofast (2002). For the presence of slipped wares in Chersonesus long after 600, see Sazanov (1992).
- 27 Sazanov (1994). According to Smokotina (2011), the percentage of ARS in 6th-century assemblages in Bosphorus is rather modest. For amphorae found in the courtyard of a house in Tiritake, see Zin'ko (2008), 329 and 335–36.

century seem to have affected the entire peninsula in basically the same way. This could only mean that the presence of fine pottery was directly associated to the explosion of the fishing and fish-salting industry.<sup>28</sup> The analysis of amphora finds bespeaks the far-reaching ramifications of the trade network to which Crimea was now connected. A large deposit of broken trade amphorae, tableware and other pottery was found in 2006 at the foot of Mount Mitridat in Kerch. The vast majority of the containers in that deposit are of Aegean origin, with amphorae carrying wine being the most important.<sup>29</sup> Unlike the Balkans, the dominant type of amphora in ceramic assemblages in the North Black Sea region is Late Roman 1 (LR 1). In Kerch, the importance of that amphora began to increase during the second quarter of the 6th century, when it reached 20 to 25 percent of all the ceramic material in some assemblages.<sup>30</sup> After the mid-6th century, however, for about a century or so, most common on all sites in the northern Black Sea were amphorae from Crete.<sup>31</sup> Whether wine, oil, or dry substances, goods in bulk packed in amphorae continued to move from the eastern Mediterranean to the northern coast of the Black Sea, most likely through the mediation of Constantinople.<sup>32</sup> It is important to note that the evidence of contacts with other, neighboring regions around the Black Sea during this period is comparatively insignificant.<sup>33</sup> Much more important was the network of distribution, whether by trade or by other means, that brought foreign goods to communities in the interior, where elements of the latest

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28 This may even be true for Hermonassa (near Taman, on the eastern shore of the Kerch Strait). Both PRS and ARS have been found in excavations on the site, but the precise chronology of their presence on the site remains unclear. Chkhaidze (2005), 149 mentions glass finds in the same context.

29 Fedoseev et al. (2010). There were also amphorae of Levantine origin found together with PRS. For another assemblage of similar structure, see Smokotina (2008). For deposits of the same date in Chersonesus, see Sazanov (2000b).

30 Smokotina (2014). For a cargo of LR 1 amphorae on a shipwreck discovered near Cape Plaka (near Partenit, on the southeastern coast of the Peninsula), see Waksman et al. (2014), 919–22. For amphorae in the Black Sea region, see also Sazanov (2007); Sazanov (2016).

31 Sazanov (2014).

32 To Jordanes, writing in Constantinople in the mid-6th century, Chersonesus was the place to which “the avaricious traders bring in the goods of Asia” (Jordanes, *Getica* v 37, 63; transl., 60). As Diller (1952), 110 has pointed out, Jordanes is the first author to call the city by its medieval name—Cherson, instead of Chersonesus.

33 Only one amphora of Pontic (presumably Crimean) origin dated to the 6th or 7th century has so far been found in the lands along the western shore of the Black Sea; see Paraschiv (2006), 41. For Constantinople as a relay for the distribution to Crimea of Danube lamps originating in the Balkans, see Curta (2016f), 87 and 89–90.

Constantinopolitan fashions were quickly adopted by the local elites.<sup>34</sup> Those elites are much more visible in the archaeological record than the upper class of the urban society in Chersonesus. The large cemeteries in the mountain region of the interior, each with a large number of multi-generational, family burial chambers carved in rock have produced an abundant evidence of social differentiation, as well as economic prosperity. The source of that prosperity, however, remains unknown. Occasional finds of bones of cattle and sheep, bird bones and eggs, as well as textile remains suggest a level of household economy otherwise comparable to that of the “Roman clients” discussed in chapter 6.<sup>35</sup> Despite the existence of rich graves on many cemetery sites in the mountain region, there are no “princely graves.” Some have therefore advanced the idea of an acephalous, segmentary society, but the existence of several “central places” with massive fortification works—Mangup, Chufut Kale, Bakla and Eski Kermen—contradicts that interpretation.<sup>36</sup> Moreover, the military posturing of the region’s elites, so visible in the deposition in male burials of various weapons (seaxes and swords, as well as spear and arrow heads)

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- 34 Khairedinova (2010). Exemplary in that respect is the piece of silk decorated with figurative patterns, which was found in a burial chamber on the southern side of Great Agora in Chersonesus, next to basilica 28; see Sorochan (2013), 245–46 and 246 fig. 92. That goods of Constantinopolitan origin reached the interior through markets in Chersonesus results from the occasional presence of coins from the mint of Chersonesus in burial assemblages in the region—one struck for Justin II and found in Luchyste (in the mountains above Alushta, in southern Crimea), the other struck for Maurice and found in Koreiz (near Yalta, on the southern coast). See Aibabin/Khairedinova (2009), 110–16 and pl. 113/1; Repnikov (1906), 36–37. See also Aibabin/Zaseckaia (2003), 50.
- 35 Cattle bones have been found in two burial chambers of the cemetery excavated in Skalyste; see Veimarn/Aibabin (1993), 122 and 126. Another burial chamber from the same cemetery produced sheep bones deposited inside a ceramic bowl [Veimarn/Aibabin (1993), 125]. A similar context (the bone of a sheep inside a ceramic bowl) has been documented in an inhumation grave from a cemetery excavated near Yalta; see Turova/Chernysh (2015), 139. A single vertebra of a sheep (or a goat) was found near the elbow of a teenager in burial chamber 79 from the cemetery excavated in Luchyste; see Aibabin/Khairedinova (2014), 126. Bird (possibly fowl) bones have been found, together with egg shells, on the floor of the burial chamber 7 in Verkh’nosadove (near Sevastopol’); see Ushakov/Filippenko (2001), 23. Egg shells are also known from Skalyste [burial chamber 494; Veimarn/Aibabin (1993), 125]. There is also evidence of fishing (in the form of fishing hooks) in three separate burial assemblages of the cemetery excavated in Suuk Su (now in Hurzuf, on the southern coast of the Peninsula): Repnikov (1907), 109 and 119–120; 147 fig. 129a–b. For textile remains, see Veimarn/Aibabin (1993), 95 and 118; Repnikov (1932), 159; Bemann et al. (2013), 40 and pl. 2/34.
- 36 Schreg/Herdick/Albert (2013); Albrecht (2016), 373. For Mangup, see Gercen (2001); Gercen (2003); Gercen et al. (2015). For Eski Kermen, see Kharitonov (2004). For Chufut Kale and Bakla, see Aibabin (2017), 20–22.

seems to indicate the rapid integration into the hierarchical system of the late 6th-century empire.<sup>37</sup> By contrast, next to nothing is known about the urban elites of Chersonesus and Bosphorus, the owners of fish-salting vats and those who profited from the booming trade with other parts of the empire.<sup>38</sup>

The importance of that trade results from the fact that throughout the 6th century, as well as later, Chersonesus had a currency of its own, which was most likely meant to meet the demands of the market economy in the city.<sup>39</sup> The single denomination was struck, initially for Emperor Justin I, at the size and weight of the 4th-century *centenionalis* and therefore circulated most likely as an equivalent of a five-*nummia* piece.<sup>40</sup> At some point before the middle of the century, the monogram of the city appeared on the reverse, and later the name Cherson(esus) replaced the name of the emperor.<sup>41</sup> This has been rightly interpreted as a recognition of the special, autonomous status of the city on the periphery of the Empire. However, it would be a mistake to interpret the peculiar coinage of Chersonesus in terms of the supposed isolation of the city. Both Egypt (as a province) and Thessalonica (as a city) had their own currencies in the form of special denominations struck specifically for the local markets (see chapter 3). The small denominations that appeared in Chersonesus and a number of other sites in the Crimea, must therefore be regarded as a response to the demand of instruments of exchange for numerous transactions of small value, in itself a sign of a vibrant market economy, and ultimately of prosperity. That prosperity clearly continued well into the 7th century, as indicated by coins that were struck for (if not also in) Chersonesus in the name of Emperor

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37 Soupault (1996). For Mangup as the residence of a local chieftain with military attributions, see Albrecht (2016), 374. For the society in the interior as a form of “military democracy,” see Furas’ev (2009), 224. High status appears to be marked primarily in female, not male burials; see Khairedinova (2002).

38 The only burials in Kerch’ and in its environs that have been attributed to members of local elites are graves of warriors; see Kazanski (2018).

39 Hahn (2000), 39 and 106–07; Choref (2013); Choref (2015), 29–38. It remains unclear whether the coins were struck at a local mint in Chersonesus or elsewhere (perhaps in Constantinople).

40 Studitskii/Butyrskii (2000); Choref (2013), 176–77 and 180; Choref (2015), 24–29; Rivera et al. (2015), 184–200. Four hoards of 4th-century *nummia* so far known from the Crimea suggest that, much like in Greece, low denominations (some of which may have been minted locally) were in circulation together with “recycled” Roman coins of the same or similar weight; see Alekseenko (2003a) and Korshenko (2013), 247, 248 and 250–51.

41 Hahn (1978), 414; Hahn (2000), 65 and 157–58.



Constans II (641–688).<sup>42</sup> Moreover, throughout the first half of the 7th century, small bronze denominations were also minted in Bosphorus.<sup>43</sup>

There are indeed no signs that the trade that boomed around 600 had slowed down eighty years later. As a matter of fact, the lucrative commerce taking place in the city of Chersonesus attracted the attention of the imperial government, as indicated by finds of seals of *kommerkiarioi*, who were state officials in charge with controlling and most likely taxing the trade. Five such seals may be dated to the reigns of Heraclius and Constans II.<sup>44</sup> Seventh-century Cherson(esus) maintained its old street grid, and the city walls were renewed at some point between the 7th and the 9th century, as indicated by excavations of the western walls and towers.<sup>45</sup> Despite such evidence, under the influence of the Marxist model of analysis, scholars have long believed that in the 7th century, the city entered a long decline, from which it recovered only after ca. 800.<sup>46</sup> During the Soviet era, the rarity of coin finds was interpreted as a sign that the economy of Chersonesus has turned “natural.”<sup>47</sup> Others take Pope Martin I’s mention of ships bringing grain to Chersonesus as an indication that, like Thessalonica a few decades earlier, the city relied on imports, and not on its hinterland for agricultural supplies.<sup>48</sup> Still others believe that the annual production of salt and salted fish was sufficiently large to procure the grain necessary for the survival of the city, given that even in the 6th century, the soil

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42 Guruleva (1996).

43 Sidorenko (2007). That coins were readily available in Bosphorus in the early 6th century results from the episode of the Huns converted to Christianity in 529. According to John Malalas, *Chronographia* xviii 14, 361 (transl., 250), they melted down their idols made of silver and electrum, and exchanged the metal in Bosphorus, “taking *miliaresia* in return.” While John Malalas specifically mentions Bosphorus as a center of trade “between Romans and Huns,” *silver* coins (*miliaresia*) were rare in the 6th century (as opposed to gold and copper), and may have been introduced into the story only to accommodate the narrative strategy focused on the destruction of the silver idols. The episode is discussed in Moravcsik (1967), 19.

44 Alekseenko (2004). For a later seal of a *kommerkiarios*, see Likhachev (1924), 175–76 and pl. x/8; Sokolova (1991), 205–06.

45 Antonova (1971), 106; Romanchuk (2005), 80–81. A substantial layer of 7th- to 8th-century material has been found underneath area 4 in district III, next to the Uvarov Basilica [Romanchuk (2005), 161].

46 Jakobson (1964), 233.

47 For a thorough critique of that notion, see Sorochan et al. (2006), 151–52. For coin circulation in and around Cherson during the 7th century, see Alekseenko (2005).

48 Curta (2016e), 150. As Neil (2010), 184 points out, Martin’s complaints about the lack of grain, oil, and wine in Chersonesus, and the exorbitant price of wheat sold from “small boats which come here occasionally to take back a load of salt” [Neil (2006), 227] cannot be taken at face value. They are in fact variations on the literary *topos* of physical hardship most typical for the *consolatio* genre going back to Ovid.

and climate conditions in the hinterland, particularly in the mountain region to the east were not favorable to large-scale agriculture.<sup>49</sup>

While next to nothing is known about agriculture in 7th-century Crimea, both the historical and the archaeological evidence for the 6th century suggests a different interpretation. The same novel of 575, through which Emperor Tiberius II forbade the collection of taxes for four years from farmers or tax-paying landowners in Scythia Minor and Moesia Inferior (see chapter 3) also exempted Chersonesus and Bosphorus from deliveries of food supplies to the fleet.<sup>50</sup> The exemption may be an indication of hard times, much like in the case of the Balkans, but Crimea appears here in a position of giver, not recipient of food supplies. Moreover, unlike the Balkans, where no open, rural settlements have so far been found that could be dated to that century (see chapter 3), remains of rural houses have been discovered in three different regions of the Crimean Peninsula. There were farming plots on the Herakleian Peninsula, just outside the city of Chersonesus, and they produced grain, wine, and vegetables. The farmhouse found on lot 32, on the western shore of the Komyshova Bay, a little more than four miles to the southwest from the city, was built in the 4th or 5th century. The building was refurbished in the late 6th or early 7th century, when it most certainly had two stories. A quern stone, a stone mortar, and a billknife bespeak the agricultural occupations of the dwellers, while bones of domesticated animals and birds, mussel shells and fish scales found in an adjacent room indicate a kitchen.<sup>51</sup> Although the next diagnostic artifacts found on the site are red clay amphorae similar to those typically found in 9th-century assemblages in the Crimea, there is no indication that the late 6th- to early 7th-century settlement ended at any point, for a new occupation to start after 800.<sup>52</sup>

At any rate, the farmhouses on the Herakleian Peninsula are not the only example of 6th- and 7th-century rural habitation. Several such houses have been found at Partenit, on the southeastern coast of the Peninsula. Each one of them had two or three rooms with a floor area of between 270 and 323 square feet, as well as a small yard or a paved ground with a covered drain. Much like

49 Sorochan (2013), 205. For environment and soil conditions in the mountain region, see Schreg (2009).

50 *Novellae* 163, 751. According to Albrecht (2012), 254, those were not taxes, but some other dues in kind to be paid by Crimean farmers. While the nature of those goods for the fleet remains unknown, one can think of such things as salted meat or biscuits. According to Hendy (1985), 50 with n. 59 this piece of information contradicts the letter of Pope Martin mentioning grain coming to Cherson from the outside.

51 Nikolaenko (1984); Iashaeva (2003), 119 and 121.

52 Iashaeva (2003), 128–29.

in the hinterland of Chersonesus, those were two-storied houses.<sup>53</sup> Unlike the settlement on the Herakleian Peninsula, the presence of a wine press suggests that the inhabitants of late 6th- to early 7th-century Partenit had vineyards.<sup>54</sup> Rural settlements in the eastern part of the Peninsula, in the hinterland of Bosphorus, were reoccupied and even enlarged during the reign of Justinian.<sup>55</sup> During the third quarter of the 6th century, those settlements seem to have witnessed rapid economic growth, clearly illustrated by the abundance of fine pottery (ARS) and amphorae, which are otherwise unusual for rural settlements elsewhere. Unlike the Herakleian Peninsula and Partenit, however, occupation of the rural sites in the Kerch Peninsula was relatively short. The development of those settlements was stopped short by the Turkic invasion of 576, which destroyed Bosphorus.<sup>56</sup> By contrast, nothing indicates the end of prosperity of the rural settlements in the Crimea at the time the Khazars established their control over the Peninsula, ca. 680.<sup>57</sup>

The 7th century did not coincide with a decline of the trade activity in Cherson and in the Crimea. After all, it was at some point during that century that Soghdian merchants established Sugdaia (now Sudak) behind Cape Alchak, on the southeastern coast of the Peninsula, while Phanagoria began to grow into a major trade center.<sup>58</sup> To judge by the existing evidence, the economic developments in the Crimea are the exact opposite of what happened in the Balkans. Instead of urban shrinking and decline, Chersonesus and, to some extent, Bosphorus grew considerably in the 6th century. Instead of an economy of subsistence, the Crimean Peninsula experienced an economic boom in the second half of the 6th century and during the first decades

53 Parshina (1991), 69–70 and 71 fig. 3; Aibabin (2005), 421.

54 The only indication that agriculture was practiced also in the mountain region immediately to the north is a sickle deposited between the legs of an individual in family burial chamber 46a excavated in Luchyste [Aibabin/Khairedinova (2014), 58–62; 179 pl. 31/2].

55 Such sites have been excavated in the immediate hinterland of Bosphorus (Zelenyi Mys, on the eastern outskirts of Kerch; Osoviny, to the northeast from Kerch), as well as farther away (Mys Ziuk, General'ske, Zolotoe, Salachik, and Sirenevaia bukhta—all on the northern coast of the Kerch Peninsula; Mikhailivka, to the west from Kerch; Opuk, on the southern coast of the Kerch Peninsula). See Sazanov/Mokrousov (1996); S.V. Mokrousov (2000); Sazanov (2005), 411.

56 Sazanov (2005), 412. For deposits in Kerch dated between 570 and 580 and attributed to the destruction inflicted by the Turks, see Sazanov (2000a).

57 Sorochan (2013), 202; Mogarichev/Sazanov/Sorochan (2017), 25–148. For an even later presence of the Khazars on the Kerch Peninsula, see Mogarichev/Sazanov (2005); Sazanov/Mogarichev (2008).

58 Vaissière (2002), 237–44; and Vaissière (2006), 179. For 7th-century Byzantine seals found on the territory of the ancient harbor of Sugdaia, see Stepanova (1999), 50–52. For Phanagoria, see Chkhaidze (2012).

of the 7th century, which was primarily based on the fishing and fish-salting industry. Instead of receiving massive assistance in the form of the *annona*, the Black Sea region during the 7th century played a major role in provisioning Constantinople and its hinterland with grain. After the fall of Egypt, first to the Persians (618), then to the Arabs (642), Crimea and Sicily became the new granaries of the empire.<sup>59</sup> Neither a peripheral city, which supposedly existed only under special circumstances, nor a "city of transitional type," Cherson(esus) now appears to historians of Byzantium as a "continuous" city with a considerably degree of continuity in infrastructure and use of space between Antiquity and the Middle Ages.<sup>60</sup> The careful study of economic developments in the Crimea during the 6th and the 7th centuries thus contradicts the orthodox thesis about "decay," crisis and the transformation of the economy during the Dark Ages: no signs of general impoverishment, no de-urbanization, and no decrease in long-distance trade. In fact, Chersonesus was most likely one of the "bases from which the medieval Byzantine economy would launch its progressive recovery in the late eighth century."<sup>61</sup>

59 Csiky (2015b), 330 notes that the shift is reflected in the dramatic changes of activity in the harbors of Constantinople. The Theodosian harbor of Yenikapı was abandoned, with new harbors gaining in significance, such as Proosphorion and Neorion in the Golden Horn Bay, which opens towards the Black Sea.

60 Brandes (1989), 21; Romanchuk (2000–2001), 146; Brubaker/Haldon (2011), 536.

61 Laiou/Morrisson (2007), 42. There is not a single mention of Cherson(esus) in Laiou and Morriison's book.

## Roman Clients: The Carpathian Basin and the Neighboring Regions (500 to 570)

In the early 6th century, despite raiding deep into the central and western Balkan provinces of the Empire, the Gepids were theoretically clients of the Roman emperor, from whom they received annual subsidies.<sup>1</sup> Meanwhile, a group of Herules, who had been badly defeated by the Lombards in 508, formed an alliance with Emperor Anastasius, who settled them in southern Pannonia, probably in the environs of Singidunum (now Belgrade; Fig. 11).<sup>2</sup> During the early years of his reign, Justinian renewed the alliance with the Gepids, as well as the payment of stipends, in order to put pressure on the Gothic hold of Sirmium (now Sremska Mitrovica, in Serbia), a city that the Gepids first took in 527.<sup>3</sup> Because the Gepids refused to leave Sirmium, Justinian stopped the payment of stipends and attacked them in 538, without much success. When military campaigns failed, the emperor allied himself with another group. In 539, King Wacho of the Lombards became a Roman client as well.<sup>4</sup> Later, Emperor Justinian granted to the Lombards “a great amount of money.”<sup>5</sup> During the first half of the 6th century, a “three-tiered Roman client system” therefore came into being, which covered almost the entire Carpathian Basin.<sup>6</sup> However, and despite considerable amounts of coined gold being shipped to that region from Constantinople, very little survives in the archaeological

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- 1 The status of imperial clients and allies dates back to the reign of Marcian (450–457), who began to pay 100 pounds of gold coins annually to the Gepid king Ardaric. See Curta (2001c), 190–91. For the Gepid raid of 517, see Sarantis (2009), 20–21, who notes that the raids were in fact meant to raise the amount of gold extracted from Constantinople. For Gepids during the first third of the 6th century, see Pandura (2004), 69–71.
  - 2 Comes Marcellinus, *Chronicle*, 98. According to Procopius of Caesarea, *Wars* VI 14.33, vol. 3, 411, at the beginning of his reign, Justinian distributed “good lands and other property” to those Herules, who were also converted to Christianity. For Herules as Roman clients, see Steinacher (2010), 350–51; Sarantis (2010), 369–70; Steinacher (2017), 145. For southern Pannonia during the first half of the 6th century, see also Gračanin (2007); Gračanin (2015).
  - 3 Sarantis, (2009), 21; Popović (2017), 13–14.
  - 4 Procopius of Caesarea, *Wars* VI 22.11–12, vol. 3, 60.
  - 5 Procopius of Caesarea, *Wars* VII 33.10, vol. 3, 440; transl., 445.
  - 6 Sarantis (2009), 27.



FIGURE 11 Principal sites mentioned in the text and in the notes (ancient names in italics)

evidence.<sup>7</sup> Most 6th-century coins found either in burial or in hoard assemblages are of copper, not of gold.<sup>8</sup> Because of the higher fiduciary nature of the copper coins, they probably had nothing to do with the payments the imperial government made to its clients. Nor can they be linked to commercial

7 Only three coins are known from burial assemblages (Gyula and Hódmezővásárhely in Hungary, and Lužice in the Czech Republic) and two from one and the same hoard assemblage (Zasovice, Czech Republic). One of the coins from Lužice was pierced in order to be turned into a pendant, which suggests a much later date of deposition. See Tănase (2010), 142; Banner (1933–1934), 260; Tejral et al., (2011), 303 and 412 pl. 80.113/1; 259–60 and 387 pl. 54/1; Militký (2003), 66–7. For the interpretation of isolated finds, see Kiss (2003), 186, 188, and 190–91. The use of gold coins is indirectly documented by occasional finds of early Byzantine bronze weights and scales. See Gohl (1913), 14–15; Freedon/Vida (2005), 370–72 and 371 fig. 7/4. A silver medal of Emperor Anastasius from an unknown location in Hungary had no monetary value and was most likely obtained as a gift; see Biró-Sey (1976).

8 With one exception, all known hoards are from the territory of the Czech Republic, so from outside the Carpathian Basin. See Biró-Sey (1987), 171; Pochitonov (1953); Kuna/Profantová (2005), 283, 284 and 286; Militký (2010), 29–31, 106–07 and 111–12; Lovász (1986–1987), 138–39 and pl. IV/3; Ruttikay (2007), 336.

transactions involving the Balkan provinces of the Empire.<sup>9</sup> The presence among finds from the Czech Republic of so-called “proto-Vandalic” issues and coins struck in Carthage suggests that the copper traveled north with mercenaries who had fought in Italy.<sup>10</sup> Such goods of Roman origin as helmets,<sup>11</sup> glassware,<sup>12</sup> or precious stones<sup>13</sup> most likely reached the Carpathian Basin by similar means or through non-commercial forms of exchange. The Roman clients—Gepids, Herules, and Lombards—never received any supplies of food from, and never traded in bulk with the Empire, or with any other region in Europe.<sup>14</sup>

At a quick glimpse, the evidence from recently excavated settlement sites seems to substantiate the general impression of self-sufficiency.<sup>15</sup> Remains

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- 9 The same is true for the few coins that the Gepid king Cunimund struck in Sirmium in imitation of Byzantine and Ostrogothic coins. See Brunšmid (1924); Meixner (1956); Demo (1981), 464 and 481; Popović (2017), 13.
- 10 Gândilă (2016), 138. A similar interpretation may be advanced for a few Ostrogothic coins found in southern Pannonia, for which see Kiss (1983–1984).
- 11 Eisner (1945–1946); Vinski (1954); Csallány (1961), 71 and 75; 72 fig. 16/1 and 3; pl. L1/8; Kiss (1983); Bóna/Nagy (2002), 73 and 299 pl. 26/96.2–4; Stein (2005). For such helmets as manufactured in the Empire, see Vogt (2006).
- 12 Török (1936), p. 10 and pl. L; Popescu (1956), 78 and 79 fig. 36/2; Kiss/Nemeskéri (1964), pp. 98–107; 112 fig. 8/6; Bárkoczi (1968), 283 and pl. LXVIII/6; Bóna/Nagy (2002), 75–76; 298 pl. 25/105.6; János Cseh et al. (2005), 63 and 237 pl. 7; Bóna/Horváth (2009), 37 and 243 pl. 8/1. For the Roman origin of the 6th-century glass finds from the Carpathian Basin, see Kiss (1999), 220. Out of all glass finds from burial assemblages, three are stemmed beakers like those produced in the 6th century in Thessalonica (see chapter 3). However, without the chemical analysis of the glass, the exact origin of those beakers cannot be established. A singular beaker from Mosonszentjános (Hungary) is most certainly of Frankish origin. See Vida (2016a), 85 fig. 87; Maul (2002), 466. For fragments of glassware found on settlement sites, see Cseh (1999c).
- 13 Quast (2001), 435–37.
- 14 *Contra*: Mesterházy (1984); Mesterházy (1999), 79–89. The evidence cited by Mesterházy (primarily bow fibulae) can be better interpreted in terms of non-commercial forms of exchange, particularly gift-giving. This is definitely the case of the bracteates of Scandinavian origin. See Petersen (1941); Bóna (1956), 187 and 190; pl. XXVIII/12; pl. XXXIII/6–9; Csallány (1961), 292; Axboe (1978); Tóth (2012), 104–05. Numerous beads made of Baltic amber have been found in 6th-century burial assemblages in the Carpathian Basin, and there is also occasional evidence of raw amber. See Csallány (1961), 225–26; pl. CCXI/11; Bóna/Nagy (2002), 63–64; 350 pl. 76/2; Sprincz (2003), 210. For the interpretation of amber finds from the Carpathian Basin and in the Crimea as the result of inter-elite gift giving, see Curta (2007).
- 15 The archaeology of 6th-century settlements in the Carpathian Basin is truly a recent development. In the early 1970s, there were no such settlements excavated in Hungary; see Bóna (1976), 44. By the late 1980s, that lack of evidence encouraged some to advance the idea that no true villages existed in the late 5th- to early 6th-century Carpathian Basin;

of 6th-century amphorae are extremely rare in the Carpathian Basin.<sup>16</sup> Both large<sup>17</sup> and smaller settlements<sup>18</sup> produced various kinds of wheel-made pottery, but no amphorae. Salvage excavations in western and southeastern Hungary, as well as northern Serbia have brought to light fine wares with burnished or stamped ornaments.<sup>19</sup> However, none of them is of Roman origin. The same is true for the 6th-century settlements excavated in Transylvania, such as Dipșa (near Bistrița), Bocșa (near Zalău), and Florești (near Cluj-Napoca).<sup>20</sup> This is in sharp contrast to the region located “in the shadow of the Empire,” near the Lower Danube, in present-day southern and eastern Romania (see chapter 8). Although there were no Roman clients in that region, the evidence of direct contacts with the Empire is much more significant than in the Carpathian Basin.

However, communities in the Carpathian Basin were neither self-sufficient, nor isolated. Many 6th-century settlement sites in the region produced evidence of manual rotation mills, in the form of quern stones. The petrographic analysis of some of those stones reveals long-distance contacts. For example, the querns found in one of the two houses excavated in Eperjes (near Szentes, in southeastern Hungary) were made of quartzitic sandstone from the north-western slopes of the Apuseni Mountains, at a distance of more than 90 miles to the east.<sup>21</sup> The specimens found in two other houses of the settlement excavated in Morești are made of dacitic rhyolite, with a hardness of 4 or 5 on the Mohs scale, which was quarried from Beclean and Ciceu, at a distance of over 50 miles to the north.<sup>22</sup> Rhyolite, andesite, and trachyte were also quarried in

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see Tóth (1987). Villages, however, are mentioned in the written sources (Theophylact Simocatta, *History* VIII 3.11, 288).

- 16 The only such remains known so far are those from Szelevény (near Szentes, in east-central Hungary), for which see Cseh (1994–1995), 115, 117 and 122 fig. 7/6–7. However, there were no amphora shards in any of the assemblages discovered earlier on a neighboring site. See Cseh (2004b).
- 17 Bocsi (2016), 23–73. Earlier, trial excavations on other 6th-century settlement sites farther to the west have produced no amphora remains. See Cseh (1987–1989), 148–54; Cseh (1997); Cseh (2004a), 49–53.
- 18 Tóth (2006), 19–20 and 23–25 (Eperjes); 29–31 (Szarvas); 33–35 (Szentes).
- 19 Skriba/Sófalvi (2004); Skriba (2006), 56–57; Freedon/Vida (2005), 378–79; Tóth (2006), 12–14; Trifunović/Pašić (2003), 280.
- 20 Gaiu (1993); Băcșeuț Crișan/Bejinariu (2014), 227–30; Rotea et al. (2006–2007), 59–61. Older excavations of 6th-century settlements in Transylvania, such as Cipău, Sânpaul, and Morești (the largest 6th-century settlement so far known from the entire Carpathian Basin) produced no amphora remains. See Vlăsa et al. (1966), 406–407; Nyárádi (2010–2011), 327–28; Horedt (1979).
- 21 Tóth (2006), 23.
- 22 Horedt (1979), 150–51.



the region of the Northern Hungarian Mountains and used for the production of the quern stones found farther to the south, at Tiszafüred, Tizzaszőlős, and Kengyel.<sup>23</sup> While rivers may have been used for the transportation over long distances (the Criş/Körös and the Tisza), no such possibility exists to explain the quern stones made of dacitic rhyolite in Moreşti.<sup>24</sup> Next to nothing is in fact known either about river or about land transportation in the 6th-century Carpathian Basin.

That quern stones were such common artifacts on 6th-century settlement sites suggests that the diet of the local populations was based on cereals. Isotope analysis of collagen from almost all skeletons discovered in a cemetery recently excavated in Szólád (Somogy County) indicates that, indeed, the community that buried its dead there in the 6th century had a diet based on millet, in addition to animal-based products.<sup>25</sup> Were those locally grown crops? Millet and barley seeds have been found scattered on the floor of one of the houses excavated in Eperjes. They suggest crop cultivation, as do the charred seeds of unidentified cereals found inside a pot from a destroyed grave of the 6th-century cemetery excavated in Szentes.<sup>26</sup> The wheat-straw bedding in grave 30 of the Vörs cemetery also indicates locally grown crops.<sup>27</sup> However, with the exception of a few harvesting tools, no agricultural implements have so far been found on any 6th-century site in the Carpathian Basin or in the neighboring regions to the northwest.<sup>28</sup> Some have concluded that the “typical activity” of the 6th-century inhabitants of the Carpathian Basin was not agriculture and that they can therefore “hardly be termed ‘peasants.’”<sup>29</sup> Their economy must have been pastoralist, as it was primarily based on cattle breeding. In fact, bone assemblages from the settlement features in Eperjes and Szarvas are dominated by cattle, with animals sacrificed at a relatively old age, which

23 Cseh (1988), 10–11. For a quern stone made of volcanic rock from Szolnok-Zagyva-part, see Cseh (1999b), 54–55 and 55 fig. 15.

24 Tóth (2014), 198 and 200.

25 Alt et al. (2014), 6–8 and 12; Alt/Müller/Held (2018), 877–78.

26 Tóth (2006), 24 and 28; Csallány (1961), 68.

27 Füzes (1964), 418.

28 Scythe: Haimovici/Blăjan (1989), 339. Sickles: Horedt (1979), 149 fig. 70/14; Török (1936), 12 and pl. LVII; Bóna/Horváth (2009), 98, 272 pl. 37/11, and 394 pl. 159/7. The relation between the evidence of agricultural implements and crop cultivation is symmetrically similar to that between carpentry tools and woodworking. Despite clear palaeobotanical evidence of different species of trees being used to build such things as coffins, shields, and spear shafts, the only woodworking tool so far known is a wimble from Bratei. See Füzes (1964), 409–19; Bărbu (1994–1995), 272 and 292 fig. 18/12.

29 Bóna (1976), 45.

suggests an economy of dairy production.<sup>30</sup> Cattle bones also predominate among faunal remains from Battonya and Morești.<sup>31</sup> At Egerlövő, the most numerous are sheep, not cattle bones.<sup>32</sup> But on both settlement and cemetery sites there is also evidence of pigs and fowl.<sup>33</sup> In cemeteries of western, as well as eastern Hungary, eggs were occasionally deposited in graves, but they also appear in settlements.<sup>34</sup> Some have been identified as hen eggs.<sup>35</sup> That suggests mixed farming, not a pastoralist economy.

In the absence of any information regarding field size, agrarian techniques, and agricultural implements, it is impossible to assess the relative significance of crops and livestock. Nonetheless, that animals were reared for more than just meat or milk indirectly results from the evidence of non-agricultural activities on 6th-century settlements. Combs and semi-finished products made of cattle and horse bones have been found together with special knives for bone and antler processing in two sunken-floored features excavated in Biharea (near Oradea, in northwestern Romania), one of which was most certainly a workshop.<sup>36</sup> Another workshop discovered in Tiszafüred apparently specialized in both bone processing and weaving.<sup>37</sup> Fragments of woolen fabric have been found in burial assemblages.<sup>38</sup> At least some of the weights found in every other settlement feature must have been attached to looms meant for weaving woolen fabrics.<sup>39</sup> In most cases, only one or a few weights have been found in

30 Tóth (2006), 28–29 and 31.

31 Szábo/Vörös (1979), 219–21; Horedt (1979), 213.

32 Lovász (1986–1987), 128–30.

33 Haimovici/Blăjan (1989), 339–42; Gál (2007).

34 Banner (1933–1934), 262; Török (1936), 6; Bóna (1956), 190; Kiss and Nemeskéri (1964), 108 and 110; Sági (1964), 363–64, 369, and 384; Stanciu/Iercoșan (2003), 149; Freeden/Vida (2005), 366; Freeden (2008), 407. Settlements: Bârzau (1994–1995), 264; Tóth (2006), 23–24.

35 Vaday (2015), 178.

36 Dumitrașcu (1982), 107–21, 111 fig. 3/1–3, 112 fig. 4, 113 fig. 5, and 114 fig. 6/1, 2, 4; Dumitrașcu (1994), pp. 171–73, pl. XCII/1, 2, and pl. XCIV/1, 2. For semi-finished products found together with cattle bones, see Horedt (1979), 93–94 and 105 fig. 48/6. Semi-finished antler products are known from both burial and settlement assemblages. See Cseh et al. (2005), 59, 234 pl. 4/1, 296 fig. 66/3.1; Cseh (2004a), 52, 62 fig. 9/7, and 63 fig. 10/1. Wasters from antler processing are also known from Biharea and Kengyel. See Dumitrașcu (1985), 1–64; Cseh (2004a), 52 and 62 fig. 9. For the manufacturing techniques, see Masek (2016), 140–43.

37 Cseh (1986), 4–5; 12 fig. 1; 14 fig. 3; 15 fig. 4; 16 fig. 5 (with a reconstruction of the loom).

38 Csallány (1961), 47 and 91; pl. XXIV/28; Tóth/Sipos (2018). There is also evidence of linen [Füzes (1964), 422–33].

39 Anghel/Blăjan (1977), 291 and 292 fig. 6/4; Horedt (1979), 88, 92, 95, 96, 99, 102 fig. 45/19, 107 fig. 50/11, 108 fig. 51/19, 109 fig. 52/16, 115 fig. 58/14, 15, 17; Szábo/Vörös (1979), 220 and 223 fig. 7/8; Dumitrașcu (1985), 61–64 and pl. II; Haimovici/Blăjan (1989), 339; Lovász (1986–1987), 129 and 134 pl. 6/1–2; Dumitrașcu (1994), 168 and 171–173, pl. XCII/7; Bârzau (1994–1995), 263–265, 267, 269–70, 293 fig. 19/7–11; Cseh (1994–1995), 126 and 125 fig. 9/2; Cseh (1997),

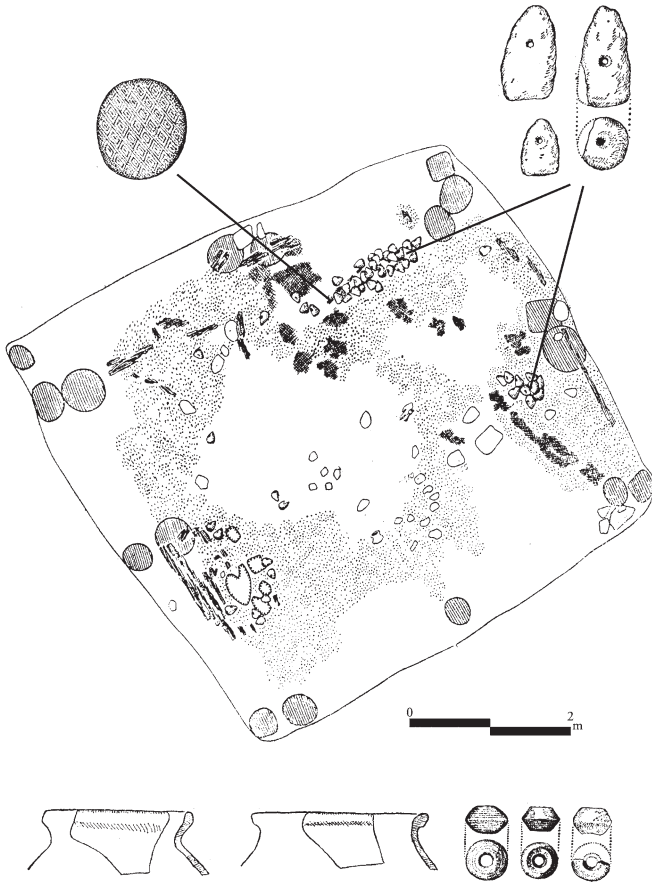


FIGURE 12  
Morești (Romania),  
house 13, plan with  
selected artifacts:  
clay lump with  
textile imprint,  
loom weights,  
wheel-made pottery,  
and spindle whorls.  
Redrawn after  
Horedt (1979)

each house, which typically lacks a fireplace. It is therefore unclear whether the building in question was a dwelling or perhaps served some other purpose.<sup>40</sup> Next to over 50 specimens found near the northern corner and on the eastern side of the pit of house 13 in Morești, there were timber remains of the upward poles and the bar of a warp-weighted loom, which stood in the interior of what was most likely a weaving shed (Fig. 12).<sup>41</sup> The same interpretation

173, 177, 182 fig. 14/1, 184 fig. 16/5, and 185 fig. 17/6–8; Gaiu (2002), 115–16 and 143 fig. 15/14; Cseh (2004b), 74, 76, 6, 83, 84, 92, 138 fig. 41/7, 140 fig. 43/22, 141 fig. 44/23, 148 fig. 51/99, 150 fig. 53/114; 157 fig. 60/173; Tóth (2006), 18–19, 23, 26, 30, and 75; pl. 2/8; Bocsi (2016), 33–58 and 62, 49 fig. 15/1–4, and 52 fig. 16/10.

40 Tóth (1984–1985), 98.

41 Horedt (1979), 93–94, 105 fig. 48/12–14, pl. 25/1, 2, pl. 26/1. More sheds may have been located in “houses” 4, 19, and 27, for which see Horedt (1979), 92, 95, and 97). According to Horedt (1979), 97, there were no less than four warp-weighted looms in “house” 27. Cseh

may apply to 36 weights found on the floor of “house” 3 in Balatonlelle.<sup>42</sup> In Rákóczipfalva, two of the three weaving sheds discovered on the site were located in the eastern part of the settlement next to features with ovens, which have also been interpreted as workshops.<sup>43</sup> That weaving may have taken place in special buildings located in a distinct area of the settlement strongly suggests that, at least in some cases, that was an “industrial,” not a household activity. Were the weavers female or male members of the community?<sup>44</sup> Were they free, or slaves? Was the activity in each one of these sheds permanent or seasonal? Were the weavers specialized workers, or was weaving a “side activity” to be performed, perhaps, on special occasions by people who were otherwise involved in farming activities? Did the weaving sheds work for the local population, or was their production meant to meet far more distant demands? Given the paucity of the circumstantial evidence, all those questions have no answers so far. However, it is beyond any doubt that there was a separate social organization of weaving as “industrial” activity, and that the economic profile of 6th-century settlements in the Carpathian Basin was not exclusively agrarian.

The only other non-agrarian activity for which there were separate, special facilities on 6th-century settlement sites is pottery production. The kiln discovered in Dipșa was located at less than 500 yards from the main cluster of settlement features. The presumably up-draught kiln was paved with slate slabs and had a bag-wall of mortared stones across the chamber to force the heat upwards.<sup>45</sup> The kiln found in Bratei (near Sighișoara, in central Transylvania) was apparently not as isolated. It was built partially on top of an earlier sunken-floored building, in which there was a loom, judging from the many weights found near the oven. The grate was made of fireclay bars supporting a firing platform on which the vessels were placed.<sup>46</sup> Next to nothing is

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(2000), 95–96 and 106 fig. 2, believes that the elongated pit in the middle of the feature 47 in Szolnok-Zagyva-part was the “foundation” of a loom. However, only two weights have been found in that feature. See also Tóth (2003), 298.

42 Skriba/Sófalvi (2004), 127–28, 129 fig. 10, 141 fig. 19, 142 fig. 20, 143 fig. 21, and 146 fig. 22. See also Cseh (1991), 159–60; 158 fig. 1; 208 pl. 11/1, 2; 219 pl. XIII/2.

43 Masek (2015), 422 and 442 fig. 12/2.

44 Unlike spindle whorls, loom weights were apparently not deposited in graves, as none was found in any burial assemblage of the Carpathian Basin. However, see Bolta (1981), 32 and pl. 5/13.

45 Gaiu (1993), 93 and 98 fig. 3. The vitrified, ceramic remains found inside the kiln are of wheel-made pottery similar to that found in the settlement.

46 Bârzú (1994–1995), 246 and 268; 278 fig. 4/5. Two other similar kilns have been found at Cernat (near Sfântu Gheorghe, in eastern Transylvania) and Szolnok-Zagyva part (Hungary). See Székely (1992), 284; Cseh (1996b), 4 and 48 fig. 9.

known about the constitutive elements of the kiln found in Törökszentmiklós (near Szolnok, in east-central Hungary), but the associated wheel-made pottery shows that that was a production center for both burnished and stamped wares.<sup>47</sup> Both wares were also produced in the kiln discovered at Szelevény, less than 30 miles to the southwest.<sup>48</sup> The study of the 6th-century pottery in the Carpathian Basin is still in its infancy, and no attempts have been made to link ceramic finds from different sites on the basis of the macroscopic examination of the fabric and the inclusions in the temper. It is therefore not possible yet to delineate the distribution area for the wares manufactured in those centers of pottery production.<sup>49</sup>

Conversely, the metallographic analyses of several swords found in graves of the cemetery excavated in Hegykő (near Sopron, in northwestern Hungary) have revealed the details of the manufacturing process, but the center(s) of production of such artifacts remain(s) unknown. Blades were made using pattern welding out of iron produced in rather primitive reduction-based smelting furnaces.<sup>50</sup> One such furnace was accidentally found in Sighișoara (in central Transylvania), along with no less than 22 lbs of iron in the form of blooms and slag, some of which was inside the furnace.<sup>51</sup> This, however, was not a clay, but a stone furnace, and it remains unclear how the blooms were extracted, and the slag eliminated.<sup>52</sup> The raw material used for smelting was bog iron, as demonstrated by the 10 lb-deposit from a sunken-floored building excavated

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47 Cseh (1990), 223–25.

48 Cseh (2004b), 85–93, 121 fig. 24, 122 fig. 25, 123 fig. 26, 124 fig. 27, 125 fig. 28, 126 fig. 29, 127 fig. 30, 128 fig. 31, 161 fig. 64, and 162 fig. 65.

49 The use of petrographic analysis on ceramic samples from three cemeteries and three settlements from western Hungary revealed that certain tempering raw materials (marble, basalt, andesite, and fragments of metamorphic rock fragments) may have been brought to the ceramic production centers (which have not otherwise been located with precision) from the outside. See Katalin Pánczél-Bajnok et al. (2014). Finds of pottery stamped with a particular ornament cluster in the region of the confluence of the Tisza with the Zagyva and the Körös rivers, which may indicate local production. See Cseh (1993), 10 and 13 fig. 5.

50 La Salvia et al. (1999); La Salvia (2007), 36–38. For the use of pattern welding for other categories of artifacts, see La Salvia (2008). For swords manufactured in the Rhineland and found in Hungary, see Kiss (1981).

51 Baltag (1979), 98–99 and pl. LX. A bloom was found, together with slag, in the filling of one of the sunken-floored houses excavated in Bratei, for which see Bărzău (1994–1995), 264 and 270), but the location of the smelting furnace in which the bloom was produced remains unknown. Nor has the bloom been subject to metallographic analysis.

52 Olteanu/Neagu/Şecleman (1981).

in Biharea.<sup>53</sup> However, no smelting site and no smithy has so far been found in the Carpathian Basin that could be dated to the 6th century.

Nor is there any evidence of special facilities for non-ferrous metalworking. A die probably for belt mounts, two ladles (one of them with traces of metal), and two moulds for casting shield-on-tongue buckles and crosses, respectively, constitute all the direct evidence for non-ferrous metalworking, and most of them are stray finds.<sup>54</sup> Nonetheless, despite the lack of excavated workshop sites, numerous finds of belt buckles and brooches, some with elaborate decoration suggest a certain degree of centralized production. Moreover, investigations under the microscope have distinguished between artifacts procured from elsewhere and local imitations. The former display traces of such sophisticated techniques as suspended cloisonné or jointed champlévé, while the production of the latter involved pseudo-cloisonné techniques, brass coating and silver inlaid.<sup>55</sup> Tools associated with non-ferrous metalworking are known only from burial assemblages. A male grave found in 1931 on the Kotlářská Street in Brno (now Czech Republic) included two hammers, a file, tongs, an anvil, remains of a wimble, and a scraping tool (Fig. 13).<sup>56</sup> That those were gold-, not blacksmithing tools results not only from the relatively small size of the anvil and the hammers, but also from the associated fragments of copper and lead sheet, parts of pewter mounts of wooden vessels, and of a copper-alloy cauldron—all scrap metal for the activity involving the associated tools.<sup>57</sup> A similar set of tools was found in 1933 in a male burial in Poysdorf (northeastern Austria, near the present-day border with the Czech Republic): three hammers, a file, two pairs of tongs, an anvil, and a scraping tool.<sup>58</sup> Much like in Brno, the assemblage also included fragments of copper and copper-alloy

53 Dumitrașcu (1985), 61–64. The bog iron was mixed with slag.

54 Müller (2008), 236 and 235 fig. 2/2; Bârzu (1994–1995), 268; Zaharia (1994–1995), 302 and 256 fig. 20/8; Dănilă (1983), 560; Rác/May (2018). Only the ladle from house 1 in Bratei 2 has a clear archaeological context. Together with the ladle, there were fragments of hand- and wheel-made pottery (including gray ware), as well as a semi-finished product of antler.

55 Horváth (2012), 234; Béla Török et al. (2018), 158–59 and 167.

56 Červinka (1936), 132 and pl. 15; Daim/Mehofer/Tóbiás (2005), 204–05 and 206; 218 fig. 4; 219 fig. 5; Hegewisch (2008). The tongs accidentally found in Morești [Horedt (1979), pl. 43/1]] are of the same size as those found in Brno. A wimble is a tool for boring holes.

57 A different question altogether is the production of the tools. Judging by the analysis of one of the hammers and of the file, the tool kit found in Brno was probably of local production; see Daim/Mehofer/Tóbiás (2005), 208–09 and 210.

58 The tools found in Poysdorf are of a much better quality than those found in Brno; see Daim/Mehofer/Tóbiás (2005), 207–08 and 209–10. Whether they were produced by local smiths, or perhaps brought from elsewhere remains a matter of debate.

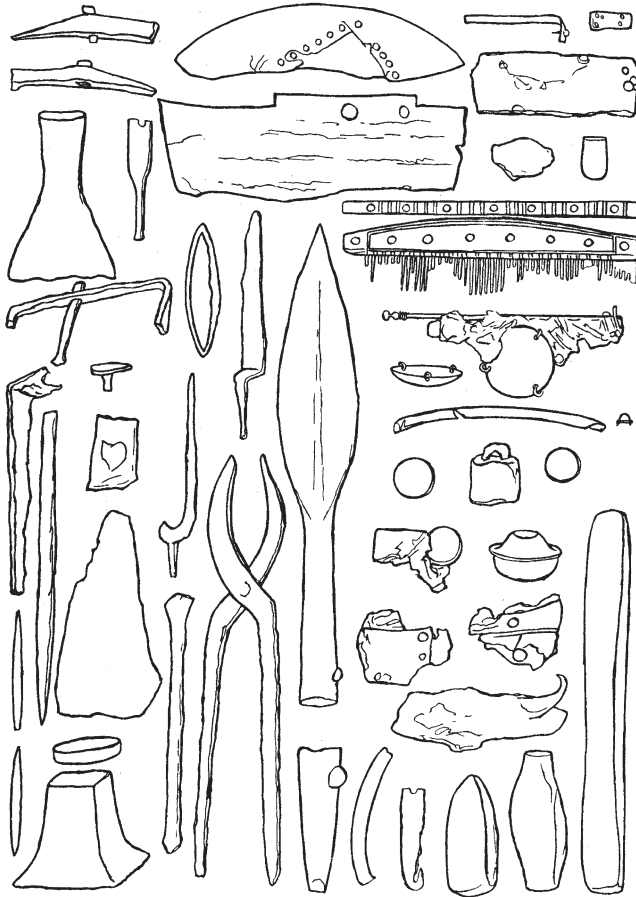


FIGURE 13 Brno (Czech Republic), male burial found in 1931, with associated artifacts: tools (hammers, file, tongs, anvil, wimple, scraping tool), weapons (lance head), scale with weights, whetstones, and scrap metal  
SOURCE: ČERVINKA (1936), PL. IV

sheet, as well as two bronze models for the casting of bow and S-shaped fibulae, respectively.<sup>59</sup> On the basis of the tool sets, the graves in both Brno and Poysdorf are believed to be of goldsmiths. However, the meaning of the tools in the grave is highly symbolic and may have nothing to do with the occupation of deceased person during lifetime.

It is worth noting that the two assemblages also include weapons (a lance head in Brno, a seax and a shield in Poysdorf) and trading implements (a

59 Daim/Mehofer/Tóbiás (2005), 203–04, 205; 215 fig. 1; 216 fig. 2; 217 fig. 3.

scale with weights in Brno), which cannot be associated with goldsmithing. Moreover, unlike the accidental find in Brno, the exact position of the tools in relation to the skeleton has been carefully recorded for Poysdorf. The tools, the models, and the fragments of metal sheet were found neatly arranged along the right leg, in direct opposition to the shield next to the left leg.<sup>60</sup> It is also important to note that the man in Poysdorf was buried inside a funerary construction on top of the grave pit, as indicated by the postholes found next to the pit's corners.<sup>61</sup> In other words, this was an elaborate burial, designed for an important person in the community. The men buried in Poysdorf and Brno had a special social status, which was not necessarily (or only) derived from their skills as craftsmen. While there can be no doubt that the tools deposited with each one of them have been used before deposition, as indicated by wear traces, there is no way to demonstrate that those who have used them were the two men with whom they have been buried. It has long been recognized that the deposition of tools in graves was symbolic.<sup>62</sup> Through the deposition of tools, those who have buried the two men in Poysdorf and Brno wanted to make a statement about their perception of the social significance of their respective deaths. It is of course quite possible that the two men have been goldsmiths, but it is likely that the symbolism of the tools is more generally related to the status of craftsmen and their social roles in 6th-century communities in the Carpathian Basin. In this respect, the ritual of burial must have brought to mind a series of cultural practices without which the tools in question would have made no sense. That only a small number of individuals were buried with tools is a clear indication not only of elevated social status, but also of the special significance attached to the occupations signified by tools, whether or not the individuals in question had truly practiced those occupations during lifetime. If crafts, particularly goldsmithing, could be conceptualized in that manner and distinguished as a "mortuary metaphor" to be employed in the ritual of burial, then craftsmen must have had a special position in society. In a way, the deposition of tools in graves mirrors the physical separation of weaving sheds and other workshops in contemporaneous settlements.

The presence of a spear head with the Brno, and of a shield with the Poysdorf man was sufficient for István Bóna to interpret both burials as graves of *arimanni*, the armed men mentioned in much later sources of Lombard

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60 Daim/Mehofer/Tóbiás (2005), 215 fig. 1.

61 Daim/Mehofer/Tóbiás (2005), 204.

62 Roth (1986), 30; Rácz (2013), 362.



Italy.<sup>63</sup> In fact, Bóna believed that the entire social structure of 7th-century Lombard society, as known from written, primarily legal sources, could be recognized in the archaeological record of Hungary. The man buried in Veszékény (Győr-Moson-Sopron County) must have been a duke, the nobility (*adalingi*) were buried in family cemeteries, such as Mosonszentjános (in Jánossomorja, Győr-Moson-Sopron County), Szentendre (Pest County) or Keszthely, while those buried on the margins of cemeteries excavated in western Hungary were natives, “pre-Lombard Germans” who had become servants of Lombard families.<sup>64</sup> However, because of the ceremonial and highly symbolic character of the burial, many have abandoned such ideas claiming that no reconstruction of the social structure is possible on the basis of the cemetery data.<sup>65</sup> The abundance and quality of grave goods is now interpreted as indicating gender and age, not rank or family membership. In fact, some have argued that the analysis of the 6th-century cemeteries in western Hungary shows that communities using those burial grounds were egalitarian, without much differentiation among family groups.<sup>66</sup> This is of course exaggerated. Even without grave goods, the evidence of social differentiation is quite clear.<sup>67</sup> The size and depth of the grave pits delineate the “social topography” of cemeteries in the

63 Bóna/Horváth (2009), 190. The *arimanni* were supposedly buried with sword, lance, and shield. Bóna (1976), 78 believed that the *arimanni* played a key role in the 6th-century society of the western parts of the Carpathian Basin. It is important to note that in Brno only a lance head was found, which according to Bóna/Horváth (2009), 187 was the custom for *faramanni* (poor freemen), not *arimanni*.

64 Bóna (1968), 36; Bóna (1976), 77 and 78; Bóna/Horváth (2009), 187. For Veszékény, see Gömöri (1987), who believed that to be a female, not male burial. For Mosonszentjános, see Vida (2013b), 353. For Szentendre, see Bóna/Horváth (2009), 93–136. For Keszthely, see Bárkoczi (1968). Similarly, Martin (1976), 199 believed that the cemetery excavated at Várpalota (Veszprém County) was the burial ground of a Lombard lord, his family, and his servants. More recently, Vida (2008), 349 claimed that the results of the archaeological excavations confirmed Bóna’s interpretation of the cemetery data as reflecting the Lombard social structure.

65 Kiss (2015), 190.

66 Werner (1962), 46 and 118. For an early critique of that idea, see Martin (1976), 199. Barbiera (2005), 307 notes that the most luxurious objects (weapons and jewelry) have the strongest correlation with age and gender. In other words, the age and gender of the elites is more visible than the age and gender of the commoners. If so, then that is definitely not an egalitarian society.

67 The occasional use of cremation along with inhumation within one and the same cemetery, as in Menőcsanak [Vaday (2015), 203 and 206], cannot be explained in terms of an egalitarian society. However, there is no archaeological evidence to support Procopius of Caesarea’s claim that the Herules practiced only cremation. Nor is there any evidence of the suttee-like ritual he describes for the “vilest of all people” (*Wars* VI 14.6–7 and 36, vol. 2, 404 and 412; transl. 346 and 348).

western parts of the Carpathian Basin: the largest and deepest graves (such as those in Szentendre and Kajdacs) were most likely of the most prominent members of the society.<sup>68</sup> In Tamási (Tolna County), male graves with weapons surround female burials.<sup>69</sup> Tamási has the largest number of weapons of all 6th-century cemeteries in the western part of the Carpathian Basin, but 75 percent of the graves in all of them have weapons, mostly spears, swords, and shields.<sup>70</sup> It is of course impossible to see all of this as evidence of the class of *arimanni*, but there can be no doubt that social differences *were* marked in burial. The proportion of male burials with weapons in the Tisza region is lower (45 percent), but between 70 and 80 percent of all graves in cemeteries excavated in that region had been robbed in the early Middle Ages, often immediately after burial.<sup>71</sup> But some of the things the robbers occasionally left behind, such as the fragments of gold sheet found in two graves of the cemetery excavated in Mezőkeresztes (Borsod-Abaúj-Zemplén County), suggest that wealth and social differences were just as marked as in the western parts of the Carpathian Basin.<sup>72</sup> It is much more difficult to explain such differences, particularly the origin of those elites, whose members were buried wrapped in silk, inside specially built funerary houses, or in graves marked off by means of circular ditches.<sup>73</sup> Here, the archaeology of settlements may be of greater value than that of cemeteries. However, there is no indication of special buildings reserved for the elites, nor indeed of wealth concentration.

Be that as it may, none of the 6th-century settlements excavated so far in the Carpathian Basin may be interpreted, like Wickham's Malling, as "a village of relative equals," nor were those communities made up exclusively of agriculturists. While bone and antler processing may indeed have been a household-based, "side" occupation, neither cloth nor pottery production was

68 Kovačová (2014), 90–91.

69 Keresztes (2017), 137 and 151 pl. 8.

70 Kiss (2012), 151. For combinations of weapons in male graves from western Hungary, see Keresztes (2015).

71 Kiss (2012), 140–55. No figures are available for Transylvania, but the grave robbery phenomenon appears to be just as prominent there as in the Hungarian Plain. At Vlaha (Cluj County), the largest 6th-century cemetery so far known from Transylvania, 90 percent of all graves were robbed; see Lăzărescu/Turcu (2013), 133. For grave robbery in Transylvania, see also Dobos (2014).

72 Simonyi (2000), 72. The assemblage in a grave accidentally found in 1903 in Gyula included a gold bracelet, a gold belt buckle, three gold mounts, and light solidus struck for Emperor Justinian at some point between 537 and 542; see Tănase (2010), 141–142; 146 fig. 1; 147 fig. 2.

73 Silk: Csallány (1961), 174. Funerary house: Bóna/Horváth (2009), 107 with fig. 73. Circular ditches: Freedden/Vida (2005), 366–67.

done exclusively by the women of the household.<sup>74</sup> “Fake” keys from graves and real locks from settlements strongly suggest social notions of personal (or family) property.<sup>75</sup> Did such notions apply to land tenure? Wells—the earliest such features in early medieval Europe—have been found next to groups of sunken-featured buildings (possibly dwellings) in both Balatonkeresztúr (Somogy County, Hungary) and Florești.<sup>76</sup> The relation between buildings and wells, however, remains unclear in the absence of any property markers.<sup>77</sup>

Ditches surrounding clusters of dwellings have also been found in the eastern parts of the Carpathian Basin, at Rákoczfalva.<sup>78</sup> Such linear features in 6th-century settlements in the Carpathian Basin have analogies in southern Germany, where they have been interpreted as defensive structures.<sup>79</sup> Moreover, two settlements in Transylvania—Șeica Mică (Sibiu County) and Porumbenii Mici (Harghita County)—are known to have been located inside prehistoric fortifications, the ramparts of which were restored in the 6th century.<sup>80</sup> It remains unclear what were the threats against which the ramparts in question were supposedly built, but this can hardly be a matter of property markers. By contrast, the ditches found in Rákoczfalva surrounded groups of houses, not the entire settlement. Their meaning must therefore be different from the military purpose of the Transylvanian ramparts. Whether barriers to prevent the access of animals left to roam freely around the settlement or boundaries of family residential quarters, the significance of those ditches cannot be detached from the notion of personal or family property.<sup>81</sup> In that respect, the settlement features identified in Rákoczfalva are directly comparable with

74 Wickham (2006), 429.

75 Bóna/Horváth (2009), 38 and 54; 243 pl. 8/14; 252 pl. 17/7; Freeden/Vida (2005), 374; Freeden (2008), 407; Anghel/Blăjan (1977), 293 and 292 fig. 6/18. The keys are “fake” because they were made of silver sheet in imitation of real keys. They have no functional value and were most likely used as ornaments. But because they looked like keys, their meaning must have also related to guarding personal or family belongings.

76 Skriba (2006), 59 and 81 fig. 13; Lăzărescu (2009), 329–30 and 355–57; 397 pl. XIX. Unlike the well in Florești, that discovered in Balatonkeresztúr was lined with stones. According to Milo (2014), 119, the earliest wells in Western Europe cannot be dated before AD 600.

77 There was a ditch on the eastern side of the settlement in Balatonkeresztúr; see Skriba (2006), 56–57 and 71 fig. 3).

78 Masek (2015), 411 and 435 fig. 5.

79 Milo (2014), 146 and 372.

80 Horedt (1964); Benkő (1992), 87–8.

81 For the interpretation of ditches as either barriers against the access of animals or boundaries of individual properties, see Milo (2014), 144–47.

the fences separating farmsteads (as individual properties) in the late 6th- to 7th-century occupation phases at Kootwijk and Odoorn (Netherlands).<sup>82</sup>

The relation between communities living in 6th-century settlements and the many kings mentioned in the sources for both Lombards and Gepids remains unknown.<sup>83</sup> Kings may have extracted some kind of tribute from those communities, but there is no evidence that they were able to turn that into a firm basis for an economically privileged status. In the absence of any information about field boundaries and land tenure, it is also impossible to understand how that tribute was produced and what relations existed between elites and ownership of land or livestock. Nor is it possible to decide whether under such circumstances, kings ruled over land or over people. Encouraged by Germanos's preparations for his expedition to Italy, Audoin, the king of the Lombards, "made ready heavy-armed soldiers and promised to send them immediately,"<sup>84</sup> To judge from Procopius' testimony, Audoin had power over men, not land.

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82 Milo (2014), 144, 402, and 427; 401 fig. 221; 427 fig. 248. Wickham (2006), 499 mentions both settlements as having a characteristic "checkerboard of farmsteads."

83 For lists of Gepid and Lombard kings in the Carpathian Basin, see Kiss (1989), 214–15.

84 Procopius of Caesarea, *Wars* VII 39.20, vol. 5, 34; transl., 458.

## Nomadic Pastoralism in Central Europe? The First Avar Century

In contrast to all military treatises before him, the author of the *Strategikon* written in the late 6th or early 7th century introduced ethnographic data into a genre traditionally restricted to purely military topics. The reason was that the author was inspired by the theory of climates, as he believed that the geographical location of a given ethnic group determined not only its lifestyle and laws, but also its type of warfare.<sup>1</sup> If the *Strategikon* specifically mentions the Avars as being “nomadic peoples,” it is because its author strongly believed that to be relevant to the war against the Avars: “they are hurt by a shortage of fodder which can result from the huge number of horses they bring with them.”<sup>2</sup> Those horses, both female and male, are furthermore said to “provide nourishment and to give the impression of a huge army.”<sup>3</sup> During summer or winter campaigns, the Avars “continuously graze their horses.”<sup>4</sup> One is therefore left with the impression that in the eyes of Byzantine authors, the Avars were the archetypal nomads, unlike the “Huns” of the steppe lands north of the Black Sea (see chapter 9). That such treatment was just a Herodotean stereotype results from the fact that the chapter of the *Strategikon* that describes the Avars is in fact dedicated to “Scythians, that is Avars, Turks, and others whose way of life resembles that of the Hunnish peoples.”<sup>5</sup> Both historians and archaeologists have uncritically adopted the stereotype, with no signs of change in the foreseeable future.<sup>6</sup>

The mention of nourishment in connection to horses may well refer to the consumption of the mare milk, as well as of horse meat. It is not clear whether

1 For the theory of the seven climates and its astrological underpinnings, see Honigmann (1929), 4–7, 9, and 92–94. For ethnographic data in the *Strategikon*, see Dagron (1987), 209–10. For the *Strategikon* and the old genre of military treatises, see Rance (2017).

2 *Strategikon* XI 2, 364; trans., 117; Kollautz (1954), 161.

3 *Strategikon* XI 2, 362; transl., 116. For the military role of the large number of horses, see Pintér-Nagy (2016), 359.

4 *Strategikon* XI 2, 362; transl., 117.

5 The Avars are specifically mentioned as a “Scythian nation” (*Strategikon* XI 2, 360). For Avars as Scythian in the *Strategikon*, see Zástěrová (1971), 15–16; Kardaras (2018), 9. For Avars in the *Strategikon*, in general, see Kardaras (2007–2008), 161–64.

6 Alapy (1933); Avenarius (1989); Lőrinczy (2001); Golev (2011); Kardaras (2012); Hurbanič (2015); Csiky (2016); Balogh (2017).

this applied to the daily lives of the Avars, or was restricted to the time of the military campaigns, when there was presumably a shortage of any other food supplies. Moreover, the grazing of horses during both summer and winter campaigns seems to suggest a wartime strategy, which may however have replicated pastoralist practices during peacetime. Was Avar pastoralism nomadic? It has long been noted that, contrary to the common opinion on the matter, the Carpathian Basin—particularly the Great Hungarian Plain (an area of about 38,610 square miles) and the Little Hungarian Plain (some 3,090 square miles)—offered no favorable conditions in the Middle Ages for the practice of nomadism.<sup>7</sup> A good part of that territory was covered by water in the valley of the Middle Danube, as well as marshlands along the Tisza River. The very large flood plain of the Tisza made very difficult the movements either from north to south, or from east to west.<sup>8</sup> Transhumance like that mentioned by Jordanes in relation to the Altziagiri (see chapter 9) is neither necessary, nor indeed possible.

The evidence of pastoralism is also problematic. To be sure, the idea that the Avars had many horses has very solid support in the archaeological evidence. A great many Early and Middle Avar-age burials contain horse bones, either entire skeletons, or only the skulls and the limbs.<sup>9</sup> Zooarchaeological studies have indicated the remarkable homogeneity of 7th-century skeletal data from the Carpathian Basin, which is most likely the result of careful culling for burial deposition, and cannot be regarded as a mirror of the actual horse stock.<sup>10</sup> It is worth mentioning, however, that all horse bones known so far from 7th-century assemblages other than burials are from sites on the edges of, or even outside the Carpathian Basin, away from the cluster of cemeteries in the Great Hungarian Plain.<sup>11</sup> In each case, the number of bones is relatively small, which suggests that horses were not kept for meat. By contrast, bones of cattle, pig, sheep or goats, as well as fowl appear in faunal assemblages from

7 *Contra*: Pohl (2018), p. 244, who believes that there are (multiple) “steppe zones” in the Middle Danube region.

8 Fodor (1995), 73–74. For the southern part of the Carpathian Basin, see Bugarski (2008).

9 Balogh (2009); Bede (2014); Garam (2016). The Avar age (ca. 570 to ca. 820) is divided into three phases on the basis of the archaeological record: Early (ca. 570 to ca. 630), Middle (ca. 630 to ca. 680), and Late (ca. 680 to ca. 820). See Stadler (2008).

10 Takács/Somhegyi/Bartosiewicz (1995), 184; Bartosiewicz (1995), 250–51; Rustoiu/Ciută (2008), 96. For Arabian horses in Avar-age burials, see Vörös (2012), 690.

11 Vencel/Zadák (1981), 686; Bârzu (1994–1995), 275; Stanciu (1998–1999), 169 and 172; Bureš/Profantová (2005), 46; Kuna/Profantová (2005), 57; Klanica (2008), 51, 162, and 169; Stanciu (2011), 334.

settlements on the northern edges of, or outside the Carpathian Basin.<sup>12</sup> They are also common in burial assemblages inside the Carpathian Basin.<sup>13</sup> The presence of pigs and fowl is regarded as “possible indicators of sedentism in the fundamentally pastoral Avar culture.”<sup>14</sup> However, the absence of any animal bones from settlement sites in the interior of the Carpathian Basin cannot be interpreted as an indication of complete sedentization. Many settlement sites have been excavated in the Great Hungarian Plain or in western Hungary, from which no bone assemblages have been published.<sup>15</sup> On the other hand, the case for the “*fundamentally* pastoral(ist)” economy of the Avar age in the Carpathian Basin is based on dubious grounds. Sunken-floored buildings of quasi-circular plan are taken to be yurts, and therefore attributed to “nomadic

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- 12 Cattle and pig: Vencl (1973), 362; Stanciu (1998–1999), 185 and 187; Istvánovits (2001), 169, 171, and 177; Kuna/Profantová (2005), 36 and 55; Klanica (2008), 150, 151, 152, 157–58, 163, 164, etc.; Stanciu (2011), 346 and 389. Sheep (or goats): Stanciu (1998–1999), 185 and 187; Klanica (2008), 158, 164, and 169; Stanciu (2011), 346. Fowl: Vencl (1973), 362; Vencl/Zadák (1981), 306; Stanciu (1998–1999), 185 and 187; Istvánovits (2001), 169; Klanica (2008), 152, 14, 158, 164, etc.; Stanciu (2011), 346.
- 13 Cattle and pig: Rhé/Fettich (1931), 37–38; Csallány (1939), 116; Bökönyi (1955), 212; Csallány (1961), 228–29; Papp (1962), 181; Kovrig (1963), 11, 13, 14, 16, etc.; Garam (1973), 281; Rosner (1975–1976), 98; Lőrinczy (1984–1985), 147; Erdélyi (1988), 194 and 195; Salamon/Sebestyén (1995), 44; Vörös (2002); Bugarski (2009), 138; Körösi (2005), 243–44; Dobos/Opreanu (2012), 68, 69, and 73; Lőrinczy/Somogyi (2018), 240. Sheep or goat: Gere (1984–1985), 227; Lőrinczy (1998), 354; Tóth (1999–2000), 405; Rózsa (2002), 342; Vörös (2002); Balogh (2003); Gulyás (2015), 504. Graves with bones of sheep or goat have been specifically interpreted as burials of Avar pastoralists, e.g., by Tomka (2005). Fowl: Rhé/Fettich (1931), 42 and 48; Csallány (1939), 131; Csallány (1961), 228–29; Kovrig (1963), 14, 20, 21, 22, 26, etc.; Fülöp (1980), 321; Salamon/Sebestyén (1995), 44; Tóth (1999–2000), 405; Dobos/Opreanu (2012), 78. For duck bones, see Müller (1999–2000), 351. For eggshells, see Rhé/Fettich (1931), 30; Csallány (1961), 229; Kovrig (1963), 10, 12, 13, etc.; Kis (1977), 98; Salamon/Sebestyén (1995), 44; Körösi (2005), 245; Bârză (2010), 189; Vörös (2012), 684.
- 14 Müller (1996), 365; Bartosiewicz (2018), 50. By the same token, the presence of bones of wild animals (deer, hare, boar, and fox) in burial, as well as settlement assemblages indicates that hunting was an important component of the subsistence economy. See Marosi/Fettich (1936), 13; Vencl (1973), 362; Vencl/Zadák (1985), 298; Istvánovits (2001), 169; Klanica (2008), 152 and 156; Stanciu (2011), 355; Dobos/Opreanu (2012), 69. See also Bartosiewicz/Biller/Choyke (2014), 325–36.
- 15 This is definitely the case of the large settlement at Dunaújváros (about 46 miles south of Budapest), on which salvage excavations were carried out in 1966, 1967, and 1970; see Bóna (1973). The same is true for Zempléngárd (northeastern Hungary, near the Hungarian-Slovak border), a site initially interpreted as cemetery; see Wolf (1996). If any animal bones have been found at Balatonmagyaród (near the western end of Lake Balaton), no mention is made of them in Szőke (2008). Animal bones have certainly been found on other sites, but no species have been identified, and no zooarchaeological reports have so far been published. See Madaras (1991); Kulcsár (2007); Hajnal (2009); Bajkai (2012), 428, 432, and 438–39; Fodor (2012); Pintér-Nagy (2018).

or seminomadic communities.”<sup>16</sup> Artifacts found in burials have been interpreted as tools of shepherds on the basis of 19th- and 20th-century ethnographic reports from East Turkestan, or simply because they look “nomadic.”<sup>17</sup> Scattered graves in small cemeteries are regarded as typical for the East European and Asian steppe lands.<sup>18</sup>

Given the available evidence, it is more likely that communities in the Carpathian Basin, as well as in the neighboring regions to the northwest and to the east, practiced a mixed economy.<sup>19</sup> Sickles found in burial assemblages are associated with both horse and chicken bones.<sup>20</sup> Querns<sup>21</sup> and clay pans<sup>22</sup> bespeak the consumption of cereal-based foods. A few remains of common wheat have been found in soil samples from burials of the cemetery excavated in 1990 in Szegvár (Fig. 14).<sup>23</sup> More direct evidence of crop cultivation, in the form of cereal seeds, is available only from the peripheral areas of the Carpathian Basin, as well as from the neighboring regions to the northwest.<sup>24</sup>

16 Vida (2016b), 262.

17 László (1940; Bugarski (2009), 111 and 138.

18 Tomka (1996), 142.

19 There is even direct evidence of viticulture, in the form of grape seeds: Fusek (1991), 296; Kenéz/Pető (2015).

20 Papp (1963), 121 and 126 fig. 18/1; Kovrig (1963), 16 and pl. VIII/31; Kiss (1977), 96 and pl. XI/45,5; Fülöp (1988), 155 and 169 fig. 16; Salamon/Sebestyén (1995), 20 and 54; 78 pl. 15/101.1; Bugarski (2009), 42, 69, and 122–23; 123 fig. 105; 173 pl. IX/37.2; 182 pl. XVIII/107.5; Rácz/Szenthe (2009), 309 and 312 fig. 4/4.1.

21 Székely (1974–1975), 39; Pleinerová (1975), 13; pls. 23/2, 24/2, 25/1, 29/2; Jelínková (1980), 420 with fig. 7; Konopa (1983), and 180 fig. 3/8; Vencľ/Zadák (1985), 302 fig. 5/2; Trifunović (1999–2000), 73 and 100 pl. XVI/1; Pleinerová (2000), 14–15 and 21; Kuna/Profantová (2005), 26, 29, 30, 31, 40, 51; 498 fig. 248/1; 522 fig. 275/1; 590 fig. 340/2; 591 fig. 341/1–3; Profantová (2005), 132 and 147 photo 22; Stanciu (2011), 354 and 395; 713 pl. 103/7; 788 fig. 177/4; Fodor (2012), 712; Pavlović (2013), 454; Čuláková (2014), 160 and 186 pl. XIV/4.

22 Bubeník (1972), 376 and 377 fig. 3/1; Vencľ (1973), 354; 357 fig. 12/7; 358 fig. 13/8, 12; 363 fig. 17/8; Jelínková (1985), 460 and 463 fig. 7/2; Janković (1986), 443 and 446 fig. 2/8, 9; Fusek (1991), 296; 321 pl. III/9, 10; 324 pl. VI/12, 13; 327 pl. IX/3; Székely (1992), 47, 259, 263, and 268; 249/B1.3; 265 fig. 14/15; Wolf (1996), 54; Stanciu (1998–1999), 164 and 214 pl. III/8; Băcuceț Crișan/Băcuceț Crișan (2000), 502; 517 pl. X/4; 518 pl. XI/3; Guștin/Tiefengraber (2002), 48 fig. 4/1–5; Stanciu/Bader (2003), 137; 147 pl. II/5–7, 9; 148 pl. III/3; Kuna/Profantová (2005), 32 and 376 fig. 126/7; Harhoiu/Baltag (2006), 14 and 229 pl. 17/1; Klanica (2008), 38, 68, 69, 78, 79, 92, 97, 101, 104; 33 fig. 22/4, 5; 71 fig. 54/8; 73 fig. 56/5, 8; 74 fig. 57/13; 77 fig. 60/10; 81 fig. 63/13; 93 fig. 75/6; 95 fig. 77/9; 96 fig. 78/6; 106 fig. 85/6, 9, 10; 93 fig. 75/21; 107 fig. 86/3; Šavel (2008), 67 and 68 fig. 12; Stanciu (2011), 356 and 359; 724 pl. 114/2, 3; 782 pl. 171/9; Pavlović (2013), 399, 443, 495, 538, 568–69, 574, and 584. According to Vida (2016b), 264, clay pans are finds “typical for sedentary people engaged in arable farming and stockbreeding.”

23 Gyulai (2011), 210–11.

24 Wheat: Fusek (1991), 295–96. Millet: Fusek (1991), 295–96. Barley: Fusek (1991), 296; Kuna/Profantová (2005), 50. Oats: Fusek (1991), 296. See also Tempír (1982); Hajnalová/





FIGURE 14 Principal sites mentioned in the text and in the notes

In Bohemia, a fallow system of farming was in place during the 7th century, as indicated by samples collected from the settlement site at Březno (near Chomutov).<sup>25</sup> Similar studies at Rostoky (near Prague) have revealed a paleobotanical spectrum most typical for intensified agriculture, with an emphasis on growing millet, free-threshing wheat and barley.<sup>26</sup> The analysis of the charcoal collected from a number of settlement features on that site shows that the settlement was surrounded by a mixture of oak-hornbeam forest, sparse coppice and brushwood used for pasture.<sup>27</sup> That pasture was used for pigs, not for

Mihályiová (2001), 79. For broad bean imprints in the paste of handmade pots, see Fusek/Olexa/Zábojník (2010), 344 and fig. 10. The charred cereal seeds, which were found next to the skull in a grave excavated in Keszthely-Fenekpuszta, have not been identified; see Müller (2010), 52.

25 Pleinerová (1984–1987), 56.

26 Kuna et al. (2013), 88 with table 11; 91 fig. 24.

27 See Novák et al. (2012), 814–15. This paleoenvironmental profile was confirmed by malacological data (molluscs), for which see Kuna et al. (2013), 84. For a geobotanical reconstruction of the landscape around Rostoky, see Sádlo/Gojda (1994), 196–202.

cattle or sheep. Since the largest number of pigs slaughtered at Roztoky died at an age of 1.5 to 2 years, while most cattle and sheep were slaughtered at a much older age (up to 11 years), an economic strategy must have been at work, whereby pigs represented the most efficient way to obtain food, while other animals were for dairy products and wool.<sup>28</sup>

Roztoky is the largest 7th-century settlement known from the whole of East Central and Eastern Europe, with more than 500 settlement features discovered so far.<sup>29</sup> Most features that may be interpreted as storage pits (silos) have been found on the northern side of the settlement.<sup>30</sup> By contrast, fragments of iron materials and hammer scale have been found in the filling of several settlement features in the southern part of the settlement, which may have been the remains of ironworking activities taking place there, although no smelting facility and no smithy has so far been found.<sup>31</sup> The bloom and the slag found in two different houses excavated in Lazuri are to be interpreted in the same way.<sup>32</sup> The same implication reasoning applies to numerous finds of iron artifacts from Early Avar age burial assemblages in the Carpathian Basin. The metallographic analysis of swords, axes, lance heads, and stirrups from the Környe cemetery reveal the use of such diverse techniques as cementation, iron-steel-iron “sandwich,” and pattern welding, all of which imply the sophisticated use of blacksmithing skills.<sup>33</sup> Such conclusions are now substantiated by microscopic studies of the metallic structure of axes from the Avar-age cemeteries in Előszállás and Úrhida.<sup>34</sup> Swaging (die forging), a method through which the heated iron is sunk into a die or a mould of an anvil to produce

28 Kuna et al. (2013), 100–06.

29 Kuna/Profantová (2005); Profantová (2005); Kuna et al. (2013), 60 and 62.

30 Kuna et al. (2013), 134. Together with the higher density of carbonized plant macroremains and the higher weed/crop ratio, the large number of silos in the northern part of the settlement indicates a greater emphasis on agricultural production and/or handling crops. By contrast, a higher frequency of assemblages of plant macroremains with more than 80 percent grain content suggests that the inhabitants of the southern part of the settlement relied on crops brought from the outside, that were already threshed out (as few to no remains of weeds have been found). The southern part of the settlement produced a larger number of pig and horse bones, which substantiate the hypothesis of a non-agricultural function of that part of the settlement.

31 Kuna et al. (2013), 126. For hammer scale as an indication of blacksmithing, see Pleiner (2006), 110 and 112.

32 Stanciu (1998–1999), 171 and 225 pl. XIV/5; Stanciu (2011), 345 and 678 fig. 68/5. A bloom was also found between the legs of the skeleton in grave 273 of the cemetery excavated in Jutas; see Fettich (1964), 82.

33 Piaskowski (1974). For pattern welding and the production of sword blades, see also Csiky (2015a), 48–53.

34 Török/Kovács/Szücs (2016).

almost identical forms is believed to have been responsible for the production of the high-quality stirrups with elongated attachment loops and of reed-shaped lance heads with grid-patterned rings.<sup>35</sup> Where those artifacts were made remains unknown, as no smithies have so far been found in the Carpathian Basin that could be dated to the late 6th or to the 7th century.<sup>36</sup>

Nonetheless, complete sets of blacksmith tools are known from burial assemblages dated to the Early Avar age. The heavy hammers found in Kölked, Csákberény, and Kisújszállás were definitely used for forging.<sup>37</sup> The long pliers from Aradac, Csákberény, Jutas, Kisújszállás, and Kunszentmárton were most likely used by blacksmiths.<sup>38</sup> By far the most spectacular assemblage, however, is a grave with tools from the cemetery excavated in the early 20th century in Band (near Târgu Mureș, Romania; Fig. 15). Almost all graves in that cemetery have been robbed in the early Middle Ages, but one of them still had a helmet, a fragment of a lancehead, and a toolbox containing pliers, hammers, anvils, drills (including mechanically driven drills), small fragments of iron, as well as slag.<sup>39</sup> Along with blacksmith tools, the toolbox also included goldsmith implements and tools: short pliers, wimbles, a chisel, a hammer-shaped cat's paw, and another tool for pulling wire or making nails, anvils, a whetstone, four prismatic bronze rods, bronze rivets, as well as scrap metal (in the form of a fragment of a silver mirror and bronze wasters) and a piece of tar.<sup>40</sup> The combination of black- and goldsmith tools (some of which may have also

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- 35 Tomka (2008), 249. As Csiky (2015a), 48 with n. 192 notes, such beliefs are not backed by any metallographic analysis. Their high quality has led to unfounded speculations about the earliest Avar-age stirrups being of Inner Asian or Byzantine origin [Csiky (2015a), 71 and 294]. For swaging, see Pleiner (2006), 64.
- 36 According to Piaskowski (1974), 123–24, a lancehead and a stirrup from Környe that have been analyzed by metallographic study were most likely produced in one and the same bloomery workshop, as the pig-iron from which both were made does not seem to have been carbonized. Csiky (2015a), 296 rightly points out that the use of pig-iron contradicts the idea of swaging.
- 37 Kiss (2001), 26 and pl. 25/10; Rác (2014), pp. 162 and 171; pls. 8/1 and 25/2. See Rác (2009), 74.
- 38 Nagy (1959), 57 and pl. v/3; Rác (2014), 150–51, 163, and 178; pls. 5/2, 6/1, 25/1, 54/5; Rhé/Fettich (1931), 32 and pl. IV/13. See Rác (2009), 79.
- 39 Kovács (1913), 398–403; 187 fig. 15/1, 5, 6, 9–11, 14–16, 18–23, 26–29; 189 fig. 16/1, 6, 9; 195 fig. 18/16–19, 21–25, 43. The deposition of slag in the grave implies that the smithy from which it was collected must not have been too far. The only parallel to the mechanically driven drill is that from a Viking-age grave in Vestly (Norway); see Tănase (2010), 32 and 113. For the reconstruction of its *modus operandi*, see Gömöri (2017), 264–64 and 264 fig. 13.
- 40 Kovács (1913), 398–403; 187 fig. 15/4, 17; 189 fig. 16/2–5, 7–8, 10–18, 32; 191 fig. 17/1, 3, 4, 6–8, 11, 13–14, 16–21; 195 fig. 18/1–7, 9–11, 13–15, 26, 31, 32, 34–36, 38–41, 42, 44–46. Some of those tools (e.g., the wimbles) may have also been used in woodworking. A cat's paw is a carpenter's tool for pulling and driving nails.

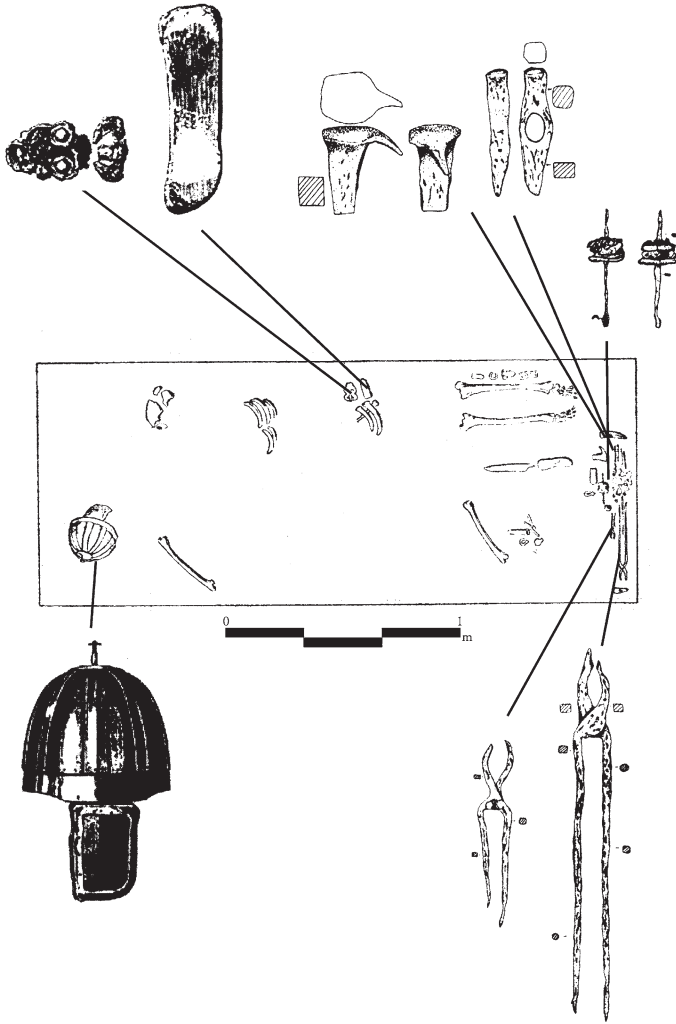


FIGURE 15 Band (Romania), grave 10 (robbed), plan and associated artifacts: belt buckle, whetstone, anvil, hammer, mechanically driven drill, helmet, and tongs. After Kovács (1913)

been used in carpentry) suggests that every craftsman of the Early Avar age was expected to be a jack-of-all-trades.<sup>41</sup> Most other graves with tools from that age are closer to the idea of goldsmith conveyed by such earlier assemblages as those found in Brno and Poysdorf (see chapter 6). However, besides such

41 Rácz (2009), 90.

typical tools as anvils, files, small hammers, pliers, and saws, shears, engraving tools, and drills, a number of burial assemblages include pressing dies for the production of belt fittings, horse tack mounts, and pendants.<sup>42</sup> The pressing technique was widely used to imitate granulation and inlaid stones.<sup>43</sup>

The most impressive collection of pressing dies is that found in 1899 in Felnac (near Arad, Romania), but similar assemblages are known from Kunszentmárton, Gátér, and Adony, while individual dies were occasionally deposited in male graves, as in Aradac.<sup>44</sup> That dies found in burial assemblages may have truly been used for the production of belt fittings results from occasional finds of matching pieces.<sup>45</sup> For example, the strap ends found in a male grave in Sânpetru German (near Arad, Romania) were most likely made with the corresponding dies found on the nearby site at Felnac.<sup>46</sup> All known dies of the Early and Middle Avar age are convex (“positive”), with a smooth backside. This suggests that the metal sheet to be ornamented was placed on the die with a thick piece of leather or fabric on top, and then hammered against the die. The sheet was made of precious metal or of a copper-alloy with no more than six percent lead.<sup>47</sup> If scrap metal was used as raw material, lead needed first to be extracted from the brass, so that a stronger alloy could be forged and snarled. By contrast, alloys with a higher concentration of lead were very good for casting. This implies that Avar-age goldsmiths were capable of adjusting alloy recipes to their various technological needs, which in turn suggests an advanced knowledge of alloy properties and high skills.<sup>48</sup> In fact, more crucibles are known from settlement assemblages on the northern and

42 Rácz (2014), 26–97 and 113–29.

43 Bálint (2010), 147.

44 Kunszentmárton: Csallány (1933). Gátér: Kada (1905), 368–70. Adony: Fettich (1926), p. 47 and pls. 1/9, 11/23, and VI/1–3. Aradac: Nagy (1959), 62 and pl. xxvi/4. For other finds of pressing dies from burial assemblages, see Rácz (2014), 158, 192, 197, and 198; pls. 70/1–4 and 75/2–6, 10; Garam (2014), 283 and 290 fig. 5/1–5; For stray finds of pressing dies from Hungary, see Fettich (1926), 33 and pl. VII/2, 5, 6; Marosi/Fettich (1936), with n. 86 and pl. VIII/45; Csallány (1933), 19 and pl. VII/8; Rácz (2014), 199 and 200; pls. 77/6, 8 and 78/7. For stray finds of pressing dies from Transylvania, see Horedt (1958), 95 and 75 fig. 13/6–8. For the abundant literature on Felnac, see Tănase, (2004–2005), 237–44.

45 *Contra*: Heinrich-Tamáška (2008), 238.

46 Dörner (1960), 427 fig. 4/2. For the match, see Garam (2001), 116–19. Another parallel may be established between other dies found in Felnac and belt mounts from burial assemblages of the cemetery excavated in Mokrin (near Kikinda, in Vojvodina, Serbia), within a short distance from Felnac; see Ranisavljev (2007), p. 81 fig. 37 and pl. xx/14–33.

47 Bühler (2002), 135; Heinrich-Tamáška (2008), 246–47.

48 Alloy recipes were based on correct proportions, for which the only possible gauge was weight. Early Byzantine weighing balances and weights typically appear in Avar-age graves together with metalworking tools and implements, as well as with raw material

northwestern edges of the Carpathian Basin, and from the adjacent regions outside it, than from burial assemblages in the Great Hungarian Plain.<sup>49</sup> Traces of brass inside one the crucibles found in Považany (near Trenčín, in western Slovakia) and of copper-tin and copper-lead alloys inside the fragment of a crucible from Pavlov (near Břeclav, Czech Republic), as well as on a fragment of a ladle from Věrovany (near Olomouc, Czech Republic) leave no doubt as to the ability of those goldsmiths to manipulate alloy composition of the alloy, as needed.<sup>50</sup> A lead bear from Pavlov had taken the form of a ladle found in the same settlement feature.<sup>51</sup> However, as in eastern and southern Romania (see chapter 8), the evidence strongly suggests metallurgical activities at a household level, with no special facilities inside settlements.<sup>52</sup> The same may be true for those goldsmiths that used metal crucibles found in burial assemblages together with files, saws, and goldsmith hammers.<sup>53</sup>

Of all casting techniques known in the early Middle Ages, the best documented archaeologically are casting “in the open” by means of a one-piece mould and two-piece casting. A clay mould for the casting of very small

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- (such as old coins). See Rhé/Fettich (1931), 32 and pl. VIIII/16–18; Sós (1978), 423–30; Kiss (1996), 103 and 487 pl. 73/A373.2, 3; Rácz (2014), 171–91 and pls. 51/1–5 and 52/1, 2, 4, 5.
- 49 Fusek (1991), 295 and 296; 297 fig. 6/1, 2; 319 pl. 1/9, 13; Fusek/ Staššiková-Štukovská/Bátora (1993), 29 and pl. x/11; Kuna/Profantová (2005), 56 and 540 fig. 292/7; pl. XXII/2; Profantová (2005), 136 and 142 photo 16; Jelinková/Šrein/Šťastný (2012), 72 and 83; 72 fig. 3/2; Profantová (2013), 154 and 161 fig. 10/3.
- 50 Staššiková-Štukovská/Krištín (1993), 60 and 58 table 1; Jelinková/Šrein/Šťastný (2012), 78–80 and 83; 79 table 2. That both brass and bronze have been identified is in direct contradiction to the conclusion drawn from the analysis by x-ray fluorescence spectrometry of Avar-age artifacts, according to which there was a “pronounced predominance of bronze over brass or mixed alloys”; see Craddock et al. (2010), 61. Such results are at variance with other studies based on X-ray fluorescence spectrometry, for which see May/Szente (2015), 386 table 1.
- 51 Jelinková/Šrein/Šťastný (2012), 80, 81, and 83; 72 fig. 3/1; 80 fig. 10; 81 fig. 11.
- 52 *Contra*: Profantová (2006), according to whom houses in which archaeologists found ladles and crucibles must be interpreted as “workshops.” See also Profantová/Kuna (2011), 84. Because of being remarkably similar in terms of alloy and morphology, the belt sets from two graves of the cemeteries excavated in Zamárdi (near Siófok, on the southern shore of Lake Balaton) and Szegvár (near Szentes, in southeastern Hungary) are believed to have been made in one and the same “workshop,” perhaps at the same time. However, the evidence simply indicates the work of a single craftsman, not of a “workshop.” See Lőrinczy/Straub (2005), 146 and 147 tables 2 and 3. Heinrich-Tamáška (2008), 239 notes that all traces of workshops are of a later (8th- or 9th-century) date.
- 53 Ódor/Rácz (2011), 24; 253 fig. 1/2; 255 fig. 3/3; Balogh (2016), 113 and fig. 4/5. By contrast, all known ladles are made of clay and have been found only in settlement assemblages: Székely (1992), 271 and 272 fig. 19/B25.1; Profantová (1998), 433 and 434 fig. 1; Kuna/Profantová (2005), 49 and 55; 514 fig. 267 /4; 535 fig. 287/14; 582 fig. 332/2; pl. XXII/4; Jelinková/Šrein/Šťastný (2012), 70; 71 fig. 1; 72 fig. 2.

granules was found on the hearth of the oven in a house of the settlement excavated in Lazuri (near Satu Mare, Romania).<sup>54</sup> Another clay mould accidentally found in Dubovac (near Kovin, in Vojvodina, Serbia) is also evidence of casting “in the open.”<sup>55</sup> However, the stone mould from a female burial of the cemetery at Vác (near Esztergom, Hungary), which was used to cast lunula-shaped pendants and small files, has funnel-shaped casting tubes and airing vents, which clearly indicate that it was used for two-piece casting.<sup>56</sup> Similar conclusions have been drawn from the microscope examination of artifacts.<sup>57</sup> However, electron-beam microanalysis and proton-induced X-ray emission analysis have revealed that some strap ends and belt mounts from the cemetery excavated in Zamárdi were decorated in the inlay wax technique, which implies knowledge of “lost-wax” casting.<sup>58</sup> Most other forms of surface treatment seem to have been done by different means. Scrapers were most likely used to obtain relief-like ornamentation, like the frets and chain pattern ornament on typically Middle Avar plated belt sets.<sup>59</sup> Scrapers were at work for the moldings of the finds in the very rich burial in Kunbábony (near Kuntszentmiklós, central Hungary) or the belt fittings in Igar (Fejér County, Hungary).<sup>60</sup> Gilding, a surface treatment technique extensively used in the Middle Avar period (ca. 630 to ca. 680), implies the use of quicksilver, which was not readily available in the Carpathian Basin and could be obtained only from the outside.<sup>61</sup> Much

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54 Stanciu (2011), 349 and 631 fig. 22/8.

55 Teicu/Aralica (2016), 160 and 167 pl. 1/3.

56 Tettamanti (1977). For models for casting strap ends and belt mounts, see Keszi (2016).

57 Heinrich-Tamáška (2002), 255–57; Heinrich-Tamáška (2005b), 148–49. Early Avar-age strap ends and belt mounts with cogged decoration (the so-called *Zahnschnittornamentik*) have a smooth backside, which is believed to be a sure sign of two-piece casting. *Contra*: Bálint (2010), 148, who believes that “all the cast pieces that belong to the Early Avar period seem to be alien to that which is generally understood to comprise ‘typical’ Avar culture.” However, as Heinrich-Tamáška (2008), 244 notes, “there is enough evidence to make the case for continuity of technological knowledge and procedures,” as the two-piece casting technique was known in the 6th century, both in the western and in the eastern parts of the Carpathian Basin. The metallographic analysis of cast artifacts has also been used to distinguish between Byzantine “imports” and genuine Avar metalwork; see Bühler (2012), 105–16.

58 Vámosi (2002), 88.

59 Heinrich-Tamáška (2002), 275 fig. 3/5 and 276 fig. 4/4, 5.

60 Tóth/Horváth (1992); Fülöp (1988), 154–55; 164 fig. 10; 165 fig. 11. According to Heinrich-Tamáška (2008), 251, both the golden scabbard mounts from Kunbábony and the belt mounts from grave 3 in Igar were embossed.

61 Költő (1982), 16. The examination by means of X-ray of laminated strap ends revealed that silvering was also employed during the Middle Avar age, but without quicksilver.

cheaper was tinning, because it involved the use of lead.<sup>62</sup> Goldsmiths of the Avar age also applied such inlay techniques as niello, damascening, and stone or glass inserts. The former is surprisingly rare in the Early Avar age, given the popularity of crescent-shaped or triangular rows of punches filled with niello paste that decorated bow fibulae and belt buckles produced in the Carpathian Basin during the 6th century.<sup>63</sup> Equally rare is damascening, a technique of inlaying gold, silver, or copper into iron.<sup>64</sup> The preferred inlay technique during the Early and Middle Avar age was glass or stone inserts. Either as cell work (cloisonné) or detached settings (cabochons), that inlay technique implies soldering of band cells or cell work.<sup>65</sup>

The multitude of analytical approaches that focus on the artifacts reveals therefore a great deal of complexity and sophistication involved in Avar-age metalworking. Both the manipulation of alloys and the use of damascened ornament and of stone or glass inserts indicate a technological level far superior to anything in existence in the neighboring regions of East Central and Southeastern Europe. The Early and Middle Avar craftsmen were highly skilled, and opened to influences from various cultural areas, both East and West.<sup>66</sup> What was the social position of craftsmen in Avar society? Some believe that graves with tools are the tombs of 7th-century blacksmiths and jewelers.<sup>67</sup> Others insist that the deposition of finished products or, as in Band, even of slag seems to point to the desire to represent in burial ceremonial the ability to transform the matter, probably as a way to emphasize the considerable skill involved in metalworking. As “lords of fire,” craftsmen could enjoy enormous social prestige, which may explain the occasional deposition of weapons,

62 Both bronze and iron artifacts were tinned in the Middle Avar period. See Jánoska (1982), 442–46; Heinrich-Tamáška (2008), 253–54.

63 According to Bálint (2010), 153, all objects decorated with niello that may be dated to the 7th century “cannot be regarded as genuine Avar products.” Heinrich-Tamáška, (2008), 255 points to a unique artifact, the disc-shaped fibula from grave 119 of the cemetery excavated in Kőlked B [Kiss (2001), pl. 29/10].

64 Bálint (2010), 153 believes the technique to indicate the influence of Merovingian goldsmith work on Avar jewelers. The damascened decoration appears primarily on belt fittings with good parallels in the Frankish milieu. See Martin (1996); Bende (2000); Müller (2002b), 43–45. However, besides belt fittings, the damascened decoration also appears on a quintessentially Avar category of artifacts—stirrups. See Müller (2006). For the Avar-age damascened ornament, see Heinrich-Tamáška (2005a).

65 For early Avar-age soldering, see Tóth (1979); Bencze/Morgós (1980); Heinrich-Tamáška (2016). For gold and/or glass inserts, see Heinrich-Tamáška (2006).

66 Heinrich-Tamáška, (2008), 256–57.

67 Turčan (1984). For a good survey of the historiography of the problem, see Tănase (2010).



helmets, or even horses, elements that make graves with tools directly comparable (albeit not identical) with “princely” graves (see below).<sup>68</sup>

Few have noted that no evidence exists that categories of craftsmen other than jewelers enjoyed the same social prestige. A recently discovered male grave in a cemetery excavated at Makó (near Szeged, next to the Romanian-Hungarian border) produced artifacts associated with bone and antler processing—half-manufactured products, composite bow reinforcement plates, as well as tools: hammers, adzes, a file, a saw, a drill, and a knife.<sup>69</sup> Whether or not that was the grave of a bowyer, as the excavator had it, there is now abundant evidence of the processing of bone and antler from burial and settlement assemblages.<sup>70</sup> Unfortunately, that evidence has been examined more from a pictorial, than from a technological point of view.<sup>71</sup> Conspicuously missing are trasological studies for the identification of tools employed by craftsmen.<sup>72</sup> The use of red deer antler, as well as leg bones of caprines or large wading birds as raw material strongly suggests that bone- and antler-working was a local, probably household-based craft.<sup>73</sup> Bow manufacturing required such preliminary work as antler soaking and the drying of wood, which suggests that bowyers may have been specialists, much like the jewelers.<sup>74</sup> And just like jewelers, craftsmen working with antler and bone were capable to work with wood as well. The detailed analysis of scabbards, as well as fragments of shields, coffins, and even weaving looms has demonstrated the selection of tree species on the basis of material qualities that best matched the planned artifacts.<sup>75</sup> Nothing indicates that woodcarving or carpentry was anything but household-based, much like textile production.<sup>76</sup> Several fragments of fabric are known from burial assemblages, while loom weights appear on

68 Rácz (2013); Tóbiás (2008). For “lords of fire,” see Daim (2003), 56.

69 Balogh (2016).

70 For half-manufactured antler and bone products, see Csallány (1939), 116 and 117 pl. 1/5, 8–10; Kovrig (1963), 36 and 47; pls. XXV/48 and LXXIII/4; Vencel (1973), ‘356 and 359 fig. 14/2; Fusek/Staššíková-Štukovská/Bátora (1993), 28 and pl. X/2, 3, 5, 6; Princová-Justová (2003), 168; Kuna/Profantová (2005), 39 and 50; 592 fig. 342/2–5. For belt fittings, see Pásztor/Tóth (2018), 272–78. For bow reinforcement plates, see Choyke (1995), 228–29. For quiver slats, see Balogh (2015). For carved bone plates decorating small boxes, see Balogh (2014). See also Daim (1996).

71 Bugarski (2016).

72 For a notable exception, see Choyke (1995).

73 Choyke (1995), 234 does not exclude the possibility that some artifacts (e.g., combs) were obtained from trade, not produced locally.

74 Choyke (1995), 234.

75 Füzes (1964), 451–52; Horváth (1979–1980), 24–25.

76 Füzes (1964), 453.

settlement sites on the northeastern edge of the Carpathian Basin.<sup>77</sup> Unlike the situation in the 6th century, there is no cluster of loom weight finds in any building, and in most cases only two or three weights have been found per house. This strongly suggests that weaving was also household-based, with no special facilities reserved for that.

The only special facilities found on Avar-age settlements in the late 6th and in the 7th century are kilns. Little is known about that found in Cernat (near Sfântu Gheorghe, Romania) other than it was an elliptical, updraft, most likely two-storied kiln.<sup>78</sup> Of greater significance is the discovery in the 1970s of several ceramic production centers at Szekszárd (Tolna County, Hungary), with no less than nine kilns.<sup>79</sup> None of those settlement sites has so far been properly published, and very little is known about the structure of the kilns other than what can be gleaned from a few photographs and drawings.<sup>80</sup> Nonetheless, the chemical analysis of the paste in some of the good-quality, wheel-made pots found in the nearby cemetery dated to the 7th century has revealed the local origin of the clay.<sup>81</sup> Moreover, provenance studies by neutron activation analysis have located two other centers of pottery production in nearby Ócsény and Dunaújváros.<sup>82</sup> To judge by the results of those studies, all wheel-made pots with stamped decoration that have been found in Early Avar cemetery and settlement sites in the Carpathian Basin were made in one of those centers of production.<sup>83</sup> This raises very important questions of labor organization and distribution. Who were the inhabitants of the settlement excavated on the Bogyiszló Street on the eastern outskirts of Szekszárd? Were they free or dependent potters? Was their village one of specialized workers, much like the smelters of the slightly earlier settlements in Walachia (see chapter 8)? Did they produce for markets inside the Avar qaganate, or was access to their

77 Fragments of textile fabric: Kovács (1913), 404 and 302 fig. 24/3; Kovrig/Korek, (1960), 262; Kralovánszky (1989–1990), 126. Loom weights: Lazin/Hep (1990), 83; Stanciu (1998–1999), 178 and 241 pl. xx/4, 6; Stanciu, (2011), 349, 353, 354, 357, 378, and 379; 699 pl. 89/9; 709 pl. 99/14; 720 pl. 110/3–5; 755 fig. 144/10, 16.

78 Székely (1992), 284.

79 Rosner (1977–1978).

80 Rosner (1982), 370–71; Rosner (1991), 140. Rosner (1981), 44 describes the kilns as each having a “pillar” at the back of the furnace chamber (with a capacity of about 42 cubic feet) and a grate with smoke vents on top of it.

81 Salamon/Duma (1984), 70–75. For a similar study of the chemical composition of the clay, see Salamon/Duma (1983), 190–94.

82 Balla (1990), 133. No less than three kilns have been found in Ócsény, according to Rosner (1990), 128. For the possibility that the potters in Ócsény came from Szekszárd, see Kory (2002), 611.

83 Rosner (1987), 126; Vida (1999), 34 and 37; Hajnal (2006), 122–25.

products function of the redistributive qualities of the Avar elite?<sup>84</sup> It has been suggested that the location of the centers of pottery production in the immediate vicinity of the Danube could only mean that the river played a key role in the the distribution of Early and Middle Avar age wheel-made pottery, but the mechanisms of that distribution remain unknown.<sup>85</sup>

Equally obscure is the existence and organization of commercial relations. Avar envoys who came to Constantinople in 563 purchased goods on the market, “both clothing and weaponry,” of which they were promptly deprived before leaving the Empire on their way back home<sup>86</sup> With the annual payments (“tribute”) that Constantinople paid the Avars rising from 80,000 in 574 to 200,000 solidi in 626, it has been estimated that about 6.5 million gold coins came to the Carpathian Basin throughout the Early Avar age, with smaller amounts of gold continuing to enter the Avar qaganate during the second half of the 7th and even in the 8th century.<sup>87</sup> There is no indication that the Avars used that money to procure goods from the markets in the Empire.<sup>88</sup> On the contrary, most of those coins remained in the Carpathian Basin, where they were presumably distributed to loyal followers as bullion. Some were pierced and modified into pendants. Others were supposedly turned into raw material for jewelry, particularly earrings.<sup>89</sup> Only a few have survived because of being deposited in graves or accidentally dropped around.<sup>90</sup> Others moved farther afield. Light-weight solidi struck for Emperor Heraclius between 616 and 625 have been found across Europe, from Hungary to England, via the Rhineland and Frisia. All those coins came from the Avar qaganate. To judge from the existing evidence, the Avars obtained the coins from stipends from

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84 Rosner (1981), 47–48 believed that the potters in Szekszárd did not produce their food, but procured it on the market, where they sold their products. According to Herold (2014), 226, the “grey pottery” produced in Szekszárd and elsewhere was meant to respond to the elaborate eating and drinking habits and the altogether different lifestyle of the Avar elites.

85 Kondé et al. (2018), 222.

86 Menander the Guardsman, frg. 5.4, 53. The Avars set monetary values for the ransom of their prisoners, an indication that they were certainly aware of market prices.

87 Pohl (2018), \ 403; Somogyi (2008), 103 and 132; Kardaras (2018), 124. Pohl (1990), 93 rightly notes that the total number of gold coins estimated to have entered the Carpathian Basin between 574 and 626 is equal to the annual military budget of the Empire under Justinian.

88 Schreiner (1994), 16.

89 Bóna (1990), 118. However, the X-ray fluorescence analysis of a number of artifacts, primarily pseudo-buckles, has demonstrated that they were all made of silver-copper-gold alloys, and not from recycled gold coins; see Heinrich-Tamáská/Voß (2018), 151–66.

90 Somogyi (1997); Kozub (1997); Kozub-Wołoszyn (1999); Wołoszyn (1999); Somogyi (2007–2008); Somogyi (2014), 189–212.

Constantinople, and then redistributed them farther to the west.<sup>91</sup> However, this could hardly be evidence of trade between the Avars and the rest of Europe. The archaeological evidence strongly suggests instead that those contacts entailed a complex network of relations between elites.<sup>92</sup> While receiving every year a great amount of gold from Byzantium, the Avars were indirectly integrated into the economic sphere and the taxation system of the empire. Inside the qaganate, gold played a key role in relations between the ruler and the aristocracy.<sup>93</sup> Walter Pohl called that a “prestige economy,” based on gift exchange between the Byzantine and the Avar elites, and he opposed it to “true” trade.<sup>94</sup> Despite the numerous informations about the ransom of prisoners, it is unclear whether the Avars engaged in slave trade.<sup>95</sup> However, much like in the case of the lands in southern and eastern Romania (see chapter 8), the presence of a relatively large number of copper coins indicates that the Avars did engage in small transactions on the market(s), which involved cash payments in basically fiduciary coins (i.e., with no intrinsic value). On the other other hand, bronze coins may have also served as raw material for the manufacture of bronze jewelry, as suggested by the assemblage in grave 360 of the cemetery excavated in Pókaszpetk.<sup>96</sup>

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- 91 Somogyi (2014), 87–134. Somogyi believes that the middlemen were the Bulgars who, in the aftermath of the civil war in the Avar qaganate, took refuge in Bavaria, an event mentioned in the so-called Chronicle of Fredegar (IV 72, 157). Parts of the Bulgar hoard consisting of coins obtained from Constantinople were then distributed across the trade network linking Bavarians to the Alamanni, Frisia, and the Anglo-Saxon world.
- 92 For the Avar qaganate as *Vermittler* between Byzantium and the rest of Europe, see Curta (2015), 646–47. The same conclusion may be drawn on the basis of Italian imitations of Byzantine light-weight solidi found in the Carpathian Basin [Somogyi’s second group of imitations, see Somogyi (2014), 149]. Those imitations may have reached the Avars as money, either as a part of the payment of stipends or, more likely, as the result of exchanges with the Lombards in Italy.
- 93 Building upon an earlier idea, Staščíková-Štukovská (1989), 55 believed that the adjustment of the volume of ceramic vessels in the Carpathian Basin to the Roman measures of capacity is an indication of integration into the empire’s economic sphere through commodity exchange.
- 94 Pohl (1990), 94. The idea was borrowed uncritically by Schmauder (2015), 679–80. Pohl (2018), 243–44 believes that the Avar society was based on the interlocking of the prestige and the subsistence economy. According to Csiky/Magyar-Hársegyi (2015), 180, the small number of Avar-age amphora finds from the Carpathian Basin shows that there was no “regular trade between the Byzantine empire and the Avar khaganate.” For an alternative explanation that still excludes trade, see Curta (2016a), 319.
- 95 Pohl (1990), 94–95. Pohl goes as far as to conclude that the social order of any “steppe empire” was threatened by free trade.
- 96 Sós (1978), 427. For the Avar-age copper coins found in the Carpathian Basin, see Somogyi (1997), 116 with n. 18; Somogyi (2008), 88–89.

To complicate the picture even further, several cases of imitations are known, most likely produced inside the Carpathian Basin. Silver imitations either of *solidi* or of *miliarensia* struck for Constans II and Constantine IV were perfunctory, in that the crude workmanship, the garbled or entirely illegible inscriptions, and the abstractions from the original design that can be observed on each one of them clearly point to the considerable distance from the prototype, in both time and space.<sup>97</sup> Those imitations may have been produced for the specific purpose of being deposited in grave. “True” coins and imitations were distributed and redistributed among the living Avars, and the same monetary instruments could serve for discharging obligations towards the dead. Indeed, if the coins in question were simply a form of gift to the dead, their social value must have depended upon other kinds of payments, some of which, at least, must have been in coin, not in kind. Exactly how coins circulated inside the Avar society, and what was their social function remains unknown, but there seems to be no doubt about the use of coins by a few members of that society, who were sufficiently close to the qagan to benefit from his redistribution of the stipends received from Constantinople.

Very little is known about Avar society, both because of the scarcity of information from written sources, and the lack of any studies of social archaeology linking burial to settlement finds. To move beyond the mere and vague mentions of leaders (*archontes*), “the powerful,” or elites (*logades*) of the Avars in contemporary sources, historians have often filled the large gaps of knowledge with information culled from the history and ethnography of other “steppe peoples,” from the 9th- to 10th-century Khazars to the 13th- and 14th-century Mongols, as if that would be applicable to the 7th-century Avars as well. In doing so, they reproduced the stereotypes of late antique ethnography, according to which all nomads were the same, irrespective of time and place.<sup>98</sup> Archaeologists, on the other hand, have focused on lavishly furnished graves, which they hastily interpreted as “princely” graves, when not labeling the richest such finds as “qagan graves.”<sup>99</sup> Taking grave goods as a direct

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97 As Somogyi (2008), 88 points out, those imitations were made on the basis of the “vague memory of, instead of closely following, the original coins.”

98 Most typical in this respect is Pohl (2018), 240–43. Paradoxically, Pohl (1991), 596 criticizes his own method.

99 Németh (1971); Tóth (1971); Tóth (1975); László (1976); Tóth (1984); Tóth (1988); Tóth/Horváth (1992); Kiss (1994); Garam (1995); Kiss (1995); Tóth (1996); Balogh/Wicker (2012); Madaras (2016). According to Tóth (1972), 153, the burial at Kunbábony is “princely,” because it contained “parts of the gold princely scourge.” But as Bálint (1996), 117 notes, treating certain artifacts deposited in graves as rank or status symbols is simply circular reasoning.

indication of social status, some have even advanced a model of Avar society with “princely” graves corresponding to the Avar elites, graves with weapons to the warrior group, in addition to graves without weapons, but with belt fittings in which commoners were buried.<sup>100</sup> Only recently have serious doubts been raised about such simplistic interpretations, that remind one of Anatolii Ambroz’s model of Marxist inspiration (see chapter 9).<sup>101</sup> Some have pointed out that all so-called “princely burials” known so far may be dated to the second or third quarter of the 7th century, and that no such burials are known either for the earlier or for the later period of the Avar age, although the presence of the Avar aristocracy is well attested in both cases.<sup>102</sup> Others have noted that various weapons were deposited in various ways in graves, each way being characteristic “only of a special, rather small region, and every community buried their members according to their own particular customs, and therefore no generally accepted social model can be constructed.”<sup>103</sup> For example, in both Transdanubia (western Hungary) and Transylvania (central Romania), men were typically buried with weapons and weapon combinations that have direct parallels in the Merovingian milieu farther to the west.<sup>104</sup> By contrast swords covered with gold sheets and ring-pommel swords appear primarily in the lands between the Middle Danube and the Tisza rivers, which has been interpreted as an indication that that was the center of the Avar qaganate, where the ruler and his retinue resided and were buried.<sup>105</sup> Weapons in that area appear together with horses (either entire skeletons, or parts thereof) in graves of the social elite.<sup>106</sup> “Horseman burials” without belt fittings are particularly numerous during the second half of the 7th century.<sup>107</sup>

100 Fülöp (1988), 189. According to Fülöp (1990), 143, the absence of everyday tools and implements is an indication of the “higher social rank for the people buried.” Čilinská (1991), 22 believed that graves without any grave goods were slave burials. For the social significance of the color symbolism associated with glass insets on belt sets, see Bálint (2000). For the deposition of weapons in Avar-age burials, see Szentpéteri (1993a); Szentpéteri (1993c); Csiky (2011).

101 Bálint (2006), 148–49. According to Bálint (1996), 119–20, the tripartite division of Avar society ultimately derives from László 1955.

102 Bálint (2006), 151.

103 Csiky (2015a), 390.

104 Such contacts with the Merovingian milieu are also documented archaeologically in pottery manufacturing, female dress, and other burial customs; see Csiky (2015a), 405.

105 Anke/Révész/Vida (2008), 57–58; Csiky (2015a), 405–06.

106 For weapons (particularly lances) buried with stirrups in graves of “professional warriors,” see Curta (2008c), 312–13 and 320.

107 Zábójník (1996), 190. The distinction between those buried with weapons and belt sets and those buried only with belt sets goes back to Szentpéteri (1985).

Gender differences, when noted at all, have also been interpreted as reflecting the tripartite division of society.<sup>108</sup> The written sources suggest that polygamy was restricted to the qagan, who sometimes took his many wives with him on campaign.<sup>109</sup> While seducing one of those wives of the qagan was a crime apparently punishable by death, Avar warriors who wintered every year among the Slavs are said to have slept with their wives and daughters, as if they were their concubines.<sup>110</sup> While in the lands between the Tisza and the Danube, all high-status burials are of men, in Transdanubia, most “elite burials” are of women, which suggests that, like in the contemporary Merovingian milieu, the social status of men was communicated vicariously through their womenfolk.<sup>111</sup> Transdanubia also offers the opportunity to examine both cemeteries and adjacent settlements. At Kölked (near Mohács, in southern Hungary), a large settlement excavated between 1972 and 1999 (as well as in 2004 and 2005) produced evidence of ditches and fences surrounding separate farmsteads, each with one or two above-ground houses surrounded by several sunken-floor buildings.<sup>112</sup> Some of those buildings produced clear evidence of prosperity (in the form of a weighing balance for gold coins) and contacts with the Empire (in the form of remains of amphorae and lamps).<sup>113</sup> The socially privileged position of those who lived in such buildings, particularly in a farmstead in the middle of the settlement, is also reflected in the richest burials (all of women) discovered on the neighboring cemetery site.<sup>114</sup> It is remarkable that the representation of elevated social status for the women buried in that cemetery employed no “Avar” elements, but instead used elements of burial

108 Čilinská (1991); Erdélyi (1990–1991), 410.

109 Theophylact Simocatta, *History* I 4.5 and 8.4, 47 and 53; Szádeczky-Kardoss (1982), 146.

110 Menander the Guardsman, frg. 27.3, 240; Fredegar, *Chronicle* IV 48, 144. The theme of the sexual exploitation of the Slavic women turned into outright physical oppression in the Russian Primary Chronicle, 55, according to which “when an Avar made a journey, he did not cause either a horse or a steer to be harnessed, but gave command instead that three or five [Slavic] women should be yoked to his cart and be made to draw him.” For the relation between those two sources, see Curta (1997), 150.

111 Heinrich-Tamáska (2011), 102–03. Whether that was a consequence of the politically subordinate position of those men in relation to the Avar qagan is a question that has not yet been explored.

112 Hajnal (2009), 99 and 104. Elsewhere, ditches have been interpreted as marking (horse) pens, not farmstead limits. See Kory (2002), 609; Szabó (2012). Similarly, wells dated, albeit tentatively, to the 7th century have been interpreted in relation to pastoral activities, not with private property; see Tomka (1996), 148; Tomka (2003), 164–65.

113 Hajnal (2005).

114 Kiss (2001), 43 and pl. 29. Hajnal (2012), 640 notes that the richest female burials in cemetery B (graves 85 and 119) appear only 30 to 50 years after the earliest evidence of elites in the settlement.

ritual and dress that were in fashion in Merovingian Francia with additional features of imperial inspiration.<sup>115</sup> Rich female burials are also known from timber burial chambers in Keszthely. Despite extensive robbing, the wealth in one of those discovered along the Fenéki Street was considerable: two golden pendants with cloisonné ornament, 15 gold imitations of Roman bronze coins, two golden beads, a golden finger-ring, fragments of a golden headdress, and 11 belt mounts with embossed ornament.<sup>116</sup> A 40- to 60-year old male was buried in a burial chamber found at Pusztaszentegyházi dűlő, next to the southern wall of the late antique stronghold. A buckle with Greek inscription, a strap end with embossed decoration, and two belt mounts belong to a sword-belt set of the so-called Civezzano type that must have been in the possession of a high-ranking member of the local aristocracy.<sup>117</sup>

The exact origin of the wealth on which this social distinction was based remains unclear, but both Kölked and Keszthely were communities enjoying a certain degree of autonomy inside the Avar qaganate.<sup>118</sup> In that respect, the social status of their inhabitants must have been different from that of the prisoners of war forcefully moved from the Balkan provinces of the Empire into the central area of the qaganate. Though allowed to have their own leaders and to retain a sense of separate identity, those people were not free.<sup>119</sup> Some believe that the captives represented a significant component of the labor

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- 115 Vida (2004). The exquisitely decorated pin found in grave 85 of the cemetery B in Kölked-Feketekapu was found on the right side of the skull, pointing downwards, an indication that it fastened a veil or the kerchief falling on the shoulder or on the right side of the head. Such fashions were out of date in the western area of Merovingian Europe, but under early Byzantine influence, the fastening of the veil still played a key role in communicating the high status of female members of the elites in the Carpathian Basin; see Vida (1999); Vida (2008), 27–28.
- 116 Müller (2002a), pp. 33 and 35; 64 fig. 10/1, 2. Vida (2008), 30 dated the cemetery to the Early Avar age (third quarter of the 6th century) on the basis of analogies for the pendants with cloisonné decoration. For a later date, ca. 600, see Heinrich-Tamáska/Horváth/Bendő (2018), 330. For slightly earlier, but equally rich graves, possibly of females, in a cemetery next to the *horreum* inside the late antique stronghold, see Bárkoczi (1968), 280–81 and 284; pls. LII/1–4, LVIII, LIX, LXV; LXIX/2, 8, 10, and LXX; Vida (2009).
- 117 Müller (1999–2000), 342, 344–45, 347, and 349; 347 fig. 4; 348 fig. 5. See also Vida (2008), 30.
- 118 Such local autonomies are also documented in the written sources (Theophylact Simocatta, *History* VIII 3.11–12, 288). See also Szádeczky-Kardoss (1982), 149; Pohl (2018), 275; Pohl (2003), 580; Kiss (2010), 123–24.
- 119 *Miracles of St. Demetrius* II 5. 285–286, p228; Szádeczky-Kardoss (1982), 149; Pohl (1991), 599; Pilon (2002), 105; Pohl (2003), 581. Theophylact Simocatta, *History* VII 10. 1, 262 mentions that prisoners of war were taken into the qaganate after the sack of Singidunum (584). In 611, Lombard captives from Italy were also forcefully moved inside the qaganate (Paul the Deacon, *History of the Lombards* IV 37, 130–31).



force inside the qaganate.<sup>120</sup> But there is no indication, either in the written or in the archaeological sources, what exactly were the captives supposed to do inside the Avar qaganate and why were they moved there in the first place. Meanwhile, there is clear evidence in the written sources that Avar warriors spent the winters in the settlements of the Slavs, who had otherwise to pay tribute to them.<sup>121</sup> Whoever was responsible for the creation of the very large “service settlement” at Roztoky, the intention was to create an industrial center on the southern part of the site, the inhabitants of which were supplied with food from the outside, presumably from the tribute paid by other communities.<sup>122</sup> It has been suggested that the intrusive population that established the settlement sites in the Upper Tisza region (especially at Lazuri) shortly before or after the year 600 came from the Lower Danube.<sup>123</sup> If so, this may have been a forced movement of population done by and under the control of the Avars, most likely in order to create “service settlements” specialized in agricultural production on the northeastern periphery of the qaganate.<sup>124</sup> The territorial organization of specialized labor is also clear in the case of the center of ceramic production in Szekszárd. On the other hand, the archaeological evidence pertaining to the social status of craftsmen is incontrovertible. Whether or not the graves with tools (such as Band, Felnac, or Kunszentmárton) were truly tombs of craftsmen, the display of artisanal skills symbolized by black- and goldsmith tools underscores the social importance accorded to the activity of those craftsmen.<sup>125</sup> Avar society may well have been made up of several incongruent parts, but it was undoubtedly stratified and hierarchically organized. *Pace* Walter Pohl, this was definitely not a society in which relations were based on animals, not land ownership.<sup>126</sup> The ditches surrounding one or

120 Pohl (2018), 246–47.

121 Fredegar, *Chronicle* IV 48, 144. Most commentators of this passage focused on the political significance of the story of Samo and seem to have entirely missed the economic dimension of the relations between Fredegars’s “Huns” (Avars) and the Slavs. See Pohl (1991), 599; Eggers (2001), 70.

122 Avenarius (1988), 137 notes that the Avars had no interest in taking over either industrial workshops in cities or agricultural land in the Balkan provinces of the empire. This in turn strongly suggests that they had no need for any of that, since they relied on abundant resources from the population under their rule in the Carpathian Basin.

123 Stanciu (2004), 354; Stanciu (2012), 177.

124 For the notion of “service settlement,” see Curta (2009).

125 Winter (1996), 355. Nonetheless, the attribution of the hoard of silver found in Zemiansky Vrbovok (near Zvolen, southern Slovakia) to a(n itinerant) craftsman [Bálint (2006), 153] is tenuous at best.

126 Pohl (1991), 597, citing the pun in Marx (1953), 390: “Angeeignet und reproduziert wird in der Tat hier nur die Herde, nicht die Erde; die aber stets temporär gemeinschaftlich benutzt wird an dem jedesmaligen Aufenthaltsplatz.”

two above-ground houses and the adjacent sunken-floored buildings discovered in Kölked cannot be interpreted as anything but markers of land property.

The lavishly furnished, female burials in southern and western Hungary do not coincide in time with the very rich male burials in the lands between the Danube and the Tisza. As a matter of fact, the female graves disappear about the same time as the “princeley graves” make their appearance. The former have been rightly interpreted as a sign that the prosperity and social prominence of the local autonomies in Kölked and Keszthely came to an end after the defeat of the Avars under the walls of Constantinople and the ensuing civil war within the qaganate.<sup>127</sup> While some have interpreted the “princely graves” in the Great Hungarian Plain as reflecting the consolidation of qaganal power after the civil war, the richest grave of all (Kunbábony) is dated to the mid-7th century. The burial of the old warrior must have taken place during a period of unrest and was therefore meant to project the fiction of power that, if not lacking, was seriously challenged from the inside<sup>128</sup> After ca. 700, together with the intensification of agriculture and the rise of large-scale smelting sites, “princely graves” and lavishly furnished female burials disappear altogether to make room for the much more standardized culture of the Late Avar period, the mirror of a transformed society.<sup>129</sup>

127 For the failed siege of Constantinople, see Hurbanič (2019). For the civil war, see Pohl (2018), 318–19.

128 Zábajník (1996), 192; Daim (2017b), 408 and 412. For the sexing and aging of the skeleton found in Kunbábony, see Kiss (1995), 136.

129 Szenthe (2014). Using an old aerial photograph, Szentpéteri (2013), 169–70 argues that the smelting site at Zamárdi was combined with an earthen fort, a “service settlement” and a cemetery—all dated to the Early Avar period (ca. 570 to ca. 630). Nothing indicates that the smelting site could be dated before the late 7th century, at the earliest, while the dates of the hillfort and the “service settlement” are unclear.

## In the Shadow of the Empire: The Lower Danube Region

“Provisions found in the surrounding countryside should not be simply wasted, but use pack animals and boats to transport them to our country.”<sup>1</sup> In chapter 3, I have used this piece of advice that the author of the *Strategikon*, a military treatise written around 600, had for Roman armies campaigning in the lands north of the river Danube, as argument in favor of the absence of any large-scale production of food in the early Byzantine forts in the Balkans.<sup>2</sup> Here it is important to stress a different aspect of this passage. For the author of the *Strategikon* knew that the Sclavenes and the Antes, who inhabited the lands north of the Lower Danube “possess on abundance of all sorts of livestock and produce, which they store in heaps, especially common millet and Italian millet.”<sup>3</sup> The apparent prosperity of the barbarians derived from mixed farming, with both crop cultivation and animal breeding.

Archaeology confirms and substantiates this interpretation of the passage in the *Strategikon*. Much like on the contemporaneous settlement sites in the Carpathian Basin (see chapter 6), finds of querns indicate a diet based on cereals.<sup>4</sup> Unlike those settlement sites, however, the consumption

1 *Strategikon* XI 4, 380; transl., 124.

2 That the advice refers to the region north of the Lower Danube results from a brief comment, according to which “the rivers there flow into the Danube, which makes transportation by boat easy” (*Strategikon* XI 4, 380; transl., 124).

3 *Strategikon* XI 4, 372; transl., 120. He also knew that the Sclavenes “bury their most valuable possessions in secret places, keeping nothing unnecessary in sight” (XI 4, 372; transl., p. 121). The reference to livestock reminds one of what Procopius of Caesarea, *Wars* VII 14.23, 270 has to say about the same Sclavenes, namely that they sacrifice to their god, the maker of lightning “cattle and all other victims” (transl., 408).

4 Fedorov (1960), 183 and pl. 68/1, 3; Constantiniu (1963), 87 and 96; Teodorescu (1971), 107; Lapushnian/Rafalovich (1973), 34; Dolinescu-Ferche (1974), 80 and 81 fig. 81; Bobi (1981), 107 and 140 fig. 27/1; Neagu (1981), 131; Rafalovich/Gol’ceva (1981), 134; Teodor (1984a), 35–36; Dolinescu-Ferche (1986), 128 and 141 fig. 14/15; Baran (1988), 112; Dolinescu-Ferche (1992), 128 and 138 fig. 7/6; Székely (1992), 251, 281, and 254 pl. 7/B5; Popilian/Nica (1998), 35 and 117; Tentiuc (1998), 202, 205, 203 fig. 1/1, 2, and 204 fig. 2/4, 5; Mitrea (2001), 98; Teodor (2013), 20, 22, and 123 fig. 31/3–5; Negru/Bădescu/Cuculea-Sandu (2009), 13; Mitrea (2015), 48 and 50; Sandu (2016), 170 and 183 pl. 11/3. The querns found in Botoșana are presumably made of “local” sandstone, but no petrographic analysis has been performed on any of the querns from the 6th-century settlements in southern and eastern Romania.



FIGURE 16 Principal sites mentioned in the text and in the notes

of cereal-based foods (pita-like, flat loaves of bread) is also confirmed by clay pans, a specific ceramic category that appeared during the second half of the 6th century.<sup>5</sup> Millet and rye have been found in a silo discovered on the 6th- to 7th-century settlement site in Dodești (Vaslui County; Fig. 16).<sup>6</sup> Moreover, imprints of millet seeds into both hand- and wheel-made pottery have been documented on several 6th-century sites on the territory of present-day Bucharest.<sup>7</sup> Traces of millet and wheat seeds were also found in the paste of clay rolls and trays from some of those sites, and millet dominates in the

5 Curta (2017).

6 Teodor (1984b), 28; Hânceanu (2011), 249.

7 Constantiniu (1965a), 79 and 92; Dolinescu-Ferche (1979), 214 and 205 fig. 22/1. No identification is available for the cereal seeds found in the paste of the clay pans found in Dănceni (near Chișinău, in the present-day Republic of Moldova), for which see Dergachev/Larina/Postică (1983), 126.

paleobotanical samples from Kodyn and Rashkiv (near Chernivtsi, in western Ukraine).<sup>8</sup> However, very little could be said about the cultivation of crops in the lands from which the author of the *Strategikon* recommended that food supplies be brought into the Empire. The presence in paleobotanical samples of such weeds as brome, yellow foxtail, and several plants of the *Cruciferae* family has been rightly interpreted as an indication of old arable fields, as well as of spring and winter crops.<sup>9</sup> That within a small micro-region, such as that of Dulceanca (near Roşiorii de Vede, in southern Romania), no less than four settlements have been found within a small distance from each other has been interpreted as an indication of “itinerant agriculture,” in which arable lands were periodically left to lie fallow for a varying number of years, sometimes for a period sufficient for old fields to turn back to waste land.<sup>10</sup> Unlike the Carpathian Basin, there is also abundant evidence of tools and implements—plowshares,<sup>11</sup> sickles,<sup>12</sup> scythes,<sup>13</sup> and billknives.<sup>14</sup> The small size of the plowshare found in a sunken-floored building in Gropşani suggests that tilled fields were relatively small, and perhaps located next to the settlement (Fig. 17). Besides cultivation of crops, there is abundant evidence of domestic animals as well. Cattle of a small size—the so-called brachicerous type—now most common in the Balkans predominate in most faunal assemblages from the 6th- to

8 Constantiniu (1963), 89; Dolinescu-Ferche/Constantiniu (1981), 307; Gorbanenko (2014), 203 with table 1; Gorbanenko (2017), 467 with table 1. Gorbanenko (2017), 463 insists that the millet seeds were preferred for separating the mass of clay from the working table of the potter.

9 Gorbanenko (2017), 471.

10 After a few years, therefore, the community of cultivators moved elsewhere, but not too far from the old fields [Curta (2001c), 276]. According to Măgureanu (2010), 260 the situation in Dulceanca is directly comparable to that in Gropşani (near Craiova, southern Romania), where two settlements have been found at a distance of less than a mile from each other.

11 Rafalovich/Lapushnian (1974), 128 and 127 fig. 9; Popilian/Nica (1998), 33 and 174 fig. 22/12. The plowshare from Selişte was broken into several parts and cannot be reconstructed. However, that from Gropşani is quite clearly a specimen of Henning’s class A3, for which most analogies are of a medieval, not late antique date. See Henning (1987), 114, 116, 125, 129, 141, 145, and 148. Hânceanu (2011), 247 mistakes the bone awls from Dodeşti for cultivators.

12 Rafalovich (1968), 94 and 96 fig. 29/4, 5; Teodor (1984a), 44 and 97 fig. 18/1; Vakulenko/Prykhodniuk (1984), 85 and 66 fig. 38/2; Dolinescu-Ferche (1992), 128 and 138 fig. 7/1; Mitrea (2001), 121, 321 fig. 61/1, and 341 fig. 80/1.

13 Teodorescu et al. (1993), 374.

14 Dolinescu-Ferche/Constantiniu (1981), 321 and 322 fig. 18/7. The billknife found in house 10 of the settlement excavated on the Soldat Ghivan Nicolae Street in Bucharest is a specimen of Henning’s class Gib, with a good analogy from a 3rd-century *villa rustica* in Turda [Henning (1987), 152].

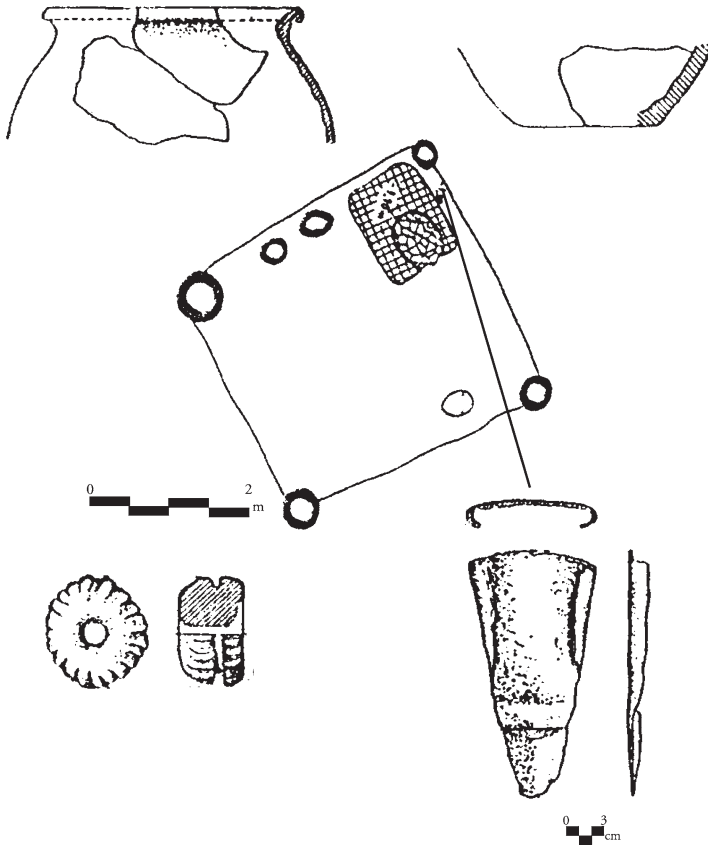


FIGURE 17 Groșșani (Romania), house 17, plan with associated artifacts: wheel-made pottery, spindle whorl, and plowshare  
 REDRAWN AT DIFFERENT SCALES AFTER POPILIAN/NICA (1998)

7th-century settlement sites that have been analyzed by zooarchaeologists.<sup>15</sup> Unlike contemporaneous assemblages of animal bones in the Carpathian Basin, there is also a significant presence of wild animals, particularly boar and deer, an indication that hunting played an important role in the subsistence economy of those communities.<sup>16</sup> On the other hand, the domestic animals

15 Haimovici (1984), 97; Haimovici (1986–1987), 254 and 258; Stanc (2006), 79, 81, 84, and 173; Haimovici (2009), 19; Frînculeasa/Dumitrașcu (2014), 129; Susi (2016), 406. For a cow bell found in a sunken-floored building in Botoșana, see Teodor (1984a), 34, 97 fig. 18/8, and 98 fig. 19/3. Pigs predominate in a few settlements in northern Moldavia, such as Udești (Suceava County). See Haimovici/Cârpuș (1982), 499–500; Haimovici (1986–1987), 258; Stanc (2006), 85.

16 Haimovici (1986–1987), 257; Frînculeasa/Dumitrașcu (2014), 129.

(both cattle and sheep) were typically slaughtered at a relatively old age, which has rightly been interpreted as an indication that they were used for dairying (and, probably, for agricultural work), and not primarily for meat.<sup>17</sup>

Much like in the Carpathian Basin, the bones of animals were also the raw material for awls and combs. Half-manufactured antler and bone products have been found on several sites in Moldavia, Moldova, and southwestern Ukraine.<sup>18</sup> Combs are also relatively common on 6th- and early 7th-century settlement sites in the region—both single- and double-sided combs.<sup>19</sup> However there is no cluster of finds either within a particular settlement site or within any building. There is, in other words, nothing like the workshops in Biharea or Tiszafüred (see chapter 6). To judge from the existing evidence, especially that of half-manufactured products, the production of combs, awls, and other bone or antler artifacts was at the level of the household, with no specialized craftsmen. The same is true for weaving. Loom weights have been found on several sites, often in the company of spindle whorls. However, there is rarely more than one specimen per assemblage, which makes it impossible to associate the presence of loom weights with weaving sheds.<sup>20</sup> Moreover, where in multiple specimens, loom weights appear in unusual assemblages such as open-air hearths, most likely in a secondary position.<sup>21</sup> Again, there is nothing comparable to the weaving sheds in Morești, Balatonlille, and Rákoczfalva. Like bone and antler processing, weaving must have been a household-based activity.

17 Haimovici (1986–1987), 255; Stanc (2006), 186–87; Haimovici (2009), 191.

18 Mitrea (2001), 342 fig. 81/1–4, 6–7; Bobi (1981), 107 and 135 fig. 25/4, 5; Rafalovich (1968), 96 fig. 29/10; Vynokur (1997), 34 and 36 fig. 5/6. The half-manufactured products found in two sunken-floored buildings in Kavetchina (near Kamianets' Podil's'kyi, near the border between Ukraine, Romania and Moldova) are of deer antler [Vakulenko/Prykhodniuk (1984), 36 and 81, 68 fig. 38/35].

19 Double-sided combs: Rafalovich/Gol'ceva (1981), 126 and 130 fig. 5/6; Vakulenko/Prykhodniuk (1984), 81, 83 and 66 fig. 38/13, 29; Mitrea (1992), 211 and fig. 14/1; Fiedler (1992), 100; Mitrea (1994), 307 and 326 fig. 26/3; Mitrea (2001), 91, 99, 336 fig. 75/5, and 338 fig. 77/3, 5, 7; Negru/Bădescu/Cuculea-Sandu (2009), 12 and 91 pl. 17/5; Frînculeasa et al. (2011), 199 and 216 pl. XI/5. The exquisite, double-sided comb from Davideni even has a special comb case and is perhaps not of local production [Mitrea (2001), 340 fig. 79]. Single-sided combs: Teodor (1980), 65 and pl. 33/5; Székely (1992), 263 and 269 fig. 17/5; Mitrea (2001), 328 fig. 67/1.

20 Rusanova/Timoshchuk (1984), 50, 60, and 20 fig. 17/1; Teodor (1984a), 33, 43, and 105 fig. 26/4; Baran (1988), 116 and 157 pl. LVI/3; Popilian/Nica (1998), 25 and 167 fig. 17/9; Mitrea (2001), 44, 109, 279 fig. 19/1, and 335 fig. 74/6, 7; Negru/Bădescu/Cuculea-Sandu (2009), 23.

21 Mitrea (2001), 126, 127, and 335 fig. 74/4. For a loom weight in a refuse pit, see Negru/Bădescu/Cuculea-Sandu (2009), 16. The loom weight supposedly found next to house 14 in Kodyn is mentioned in another place as having been found elsewhere [Rusanova/Timoshchuk (1984), 17 and 20 fig. 17/4].

To a similar conclusion leads the examination of the evidence pertaining to non-ferrous metallurgy. Unlike the Carpathian Basin, a great number of clay and stone moulds have been found in the Lower Danube region now divided between Romania, the Republic of Moldova, and Ukraine.<sup>22</sup> Some of them are stray finds.<sup>23</sup> Only a few of those with known archaeological contexts have been found together with other implements involved in casting, such as ladles or crucibles.<sup>24</sup> The presence in those assemblages of hand- and wheel-made pottery, including amphora shards, of such ordinary tools as knives, as well as of animal bones strongly suggests that those were not workshops, but dwellings.<sup>25</sup> Like loom weights, ladles and crucibles, though relatively numerous, have been found more often singly than in association with each other or in multiple specimens.<sup>26</sup> Sometimes, fragments of copper and bronze sheet, presumably used as scrap metal, appear in settlement assemblages together

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- 22 Ciupercă/Măgureanu (2009), 150 count 113 specimens known so far, 13 of which are stray finds. For a gazetteer of finds, see Teodor (2005), 163–65.
- 23 Constantiniu (1966), 674–75 and 675 fig. 5/3; Preda (1967), 513–15; Teodorescu (1972), 91, 93, 95, 96, 78 fig. 2/5, 82 fig. 4/5, 83 fig. 5/4, 5, and 85 fig. 7/1, 3; Mitrea (1979), 151–52 and 153 fig. 4/3; Miclea/Florescu (1980), 209 and pl. 760; Bobi (1981), 107 and 140 fig. 27/5; Măgureanu/Ciupercă (2004–2005), 301–02, 311 fig. 3, and 317 fig. 9; Măgureanu (2008), 174–75 and 185 fig. 2.
- 24 Moulds found together with ladles or crucibles: Dolinescu-Ferche/Constantiniu (1981), 323 and fig. 19/1; Mitrea (1994), 289 and 329 fig. 28/3; Teodor (2013), 20 and 124 fig. 32/8. For other settlements finds, see Rafalovich (1972), 124 fig. 3/2; Rafalovich/Lapushnian (1973), 133 and fig. 10/4; Dolinescu-Ferche (1974), 87 and 96 fig. 106/4; Bobi (1981), 107 and 138 fig. 25/6; Teodor (1984a), 40–41, 98 fig. 19/6, 99 fig. 20/1, 3, and 100 fig. 21/1; Teodor (1984b), 25 and 30 fig. 7/2, 3; Dănilă (1986), 102–03; Teodorescu et al. (1993), 374; Teodorescu et al. (1999), 92; Mitrea (2001), 325 fig. 65/1, 4; Măgureanu/Ciupercă (2004–2005), 294, 302–305, 301 fig. 2, 312 fig. 4, 313 fig. 5, 310 fig. 7, 316 fig. 8, 317 fig. 9, and 318 fig. 10; Mitrea (2015), 32, 169 fig. 48, and 170 fig. 49.
- 25 Dolinescu-Ferche/Constantiniu (1981), 293–94, 297, 307, 209, 311, and 318–23; Mitrea (2001), 71–72 and 229. *Contra*: Teodor (2006), 195.
- 26 Lăzărescu-Ionescu et al. (1954), 248, 259, and 231 fig. 40/8; Rafalovich (1965), 124; Teodorescu (1972), 93 and 78 fig. 2/2; Matei/Rădulescu (1973), 272, 274, and 275 fig. 8/1, 2; Mitrea (1974–1976), fig. 13/3; Teodor (1975), 152 and 198 fig. 59/5; Muscă/Muscă (1980), 427 and 428 fig. 8; Teodor (1984a), 35, 99 fig. 20/6, and 122 fig. 43/4; Rusanova/Timoshchuk (1984), 49–50 and 85; Baran (1988), 84, 92, 102, 112, 113, 149 pl. xxv/5–6, 151 pl. xxxii/2, 153 pl. xli/2, 159 pl. lxi/3, 11; Dolinescu-Ferche (1992), 133 and 146 fig. 15/20; Mitrea/Dumitroaia/Ciubotaru (1997), 173 and 183 fig. 83/4; Mitrea (1998), 38 and 141 fig. 25/7; Popilian/Nica (1998), 29, 31, 172 fig. 20/5, and 173 fig. 21/8; Mitrea (2001), 63, 121, 335 fig. 74/5, and 359 fig. 98/2; Postică (2007), fig. 42/7; Teodor (2013), 17, 21, 22, 124 fig. 32/4–6, and 143 fig. 52/2; Sandu (2016), 168 and 183 pl. 11/7. There were traces of oxides inside the crucible found in house 25 in Davideni, which suggests that it had been used for casting. For ladles and crucibles found together, see Rafalovich (1965), 124; Teodor (1984a), 37, 98 fig. 19/14, 99 fig. 20/2, 5, and 100 fig. 21/1; Baran (1988), 113 and 157 pl. liv/8, 9; Dejan (2015), 78 and fig. 2.



with moulds. More often than not, however, scrap metal is not associated with any casting implements.<sup>27</sup> Leaving aside for the moment questions about site taphonomy, and the circumstances in which some of those settlement features may have been abandoned, and then used as dumping grounds, there is hardly any evidence of special facilities reserved for craft activities. Most so-called “workshops” are in fact dwellings in which some craft activities were occasionally carried out. That more than one settlement feature produced evidence of bone or antler processing, weaving, and casting strongly suggests the lack of specialization or, at the very least, the existence within each community of more than one craftsman. Just how industrial activities could take place within the domestic space of one’s house is best illustrated by a sunken-floored building brought to light during the 1990 excavations on the settlement site at Bernashivka, on the left bank of the Upper Dniester river, less than seven miles from the border between Ukraine and the Republic of Moldova (Fig. 18).<sup>28</sup> Judging from the three spindle whorls found in the associated assemblage, somebody in that house was busy spinning yarn, if only every now and then.<sup>29</sup> Cooking must have been done by the gate of the stone oven in the northeastern corner of the building, as revealed by the abundant ceramic material found in that area—both hand- and wheel-made pottery, including fragments of amphorae.<sup>30</sup> However, the oven was also used for casting. A ladle was found by the oven gate, and together with that were no less than 68 soapstone moulds for casting dress accessories (buckles, strap ends, and pendants) and their various, decorative components.<sup>31</sup> There is also a mould for casting “Slavic” bow fibulae. That, and several other moulds have funnel-shaped casting tubes and airing vents, which clearly indicate that they were used for the two-piece casting

27 Together with moulds: Dolinescu-Ferche (1974), 87 and 96 fig. 106/6; Teodor (1984b), 25 and 31 fig. 8/6, 7; Teodor (2103), 20 and 118 fig. 26/13. Without any casting implements: Lăzărescu-Ionescu et al. (1954), 192; Roman/Ferche (1978), 84; Vakulenko/Prykhodniuk (1984), 76 and 68 fig. 38/30; Popilian/Nica (1998), 15 and 22; Mitrea (2001), 95 and 320 fig. 60/8, 9; Negru (2002), 66 and 67 fig. 6/8. Fragments of copper sheet have also been found in the coin hoard buried in a copper-alloy pitcher in Horgești (near Bacău, central Moldavia), for which see Căpitanu (1971), 255; Musteață (2010).

28 Vynokur/Megei (1992); Vynokur (1997), 40, 41 fig. 8, 42 fig. 9, 43 fig. 10, and 44 fig. 11.

29 Vynokur/Megei (1992), 91 fig. 11/7–9.

30 Vynokur/Megei (1992), 90 fig. 10/1–3 and 91 fig. 11/1–6, 10.

31 Vynokur (1997), 54 fig. 16, 55 fig. 17, 57 fig. 18, 59 fig. 19, 61 fig. 20, 63 fig. 21, 64 fig. 22, 65 fig. 23, 66 fig. 24, 67 fig. 25, 71 fig. 26, 72 fig. 27, 74 fig. 28, 75 fig. 29, 77 fig. 30, 78 fig. 31, 79 fig. 32, 81 fig. 34, 85 fig. 35, 86 fig. 36, 87 fig. 37, 89 fig. 38, 91 fig. 39, 93 fig. 40, 94 fig. 41, 95 fig. 42, and 97 fig. 43.

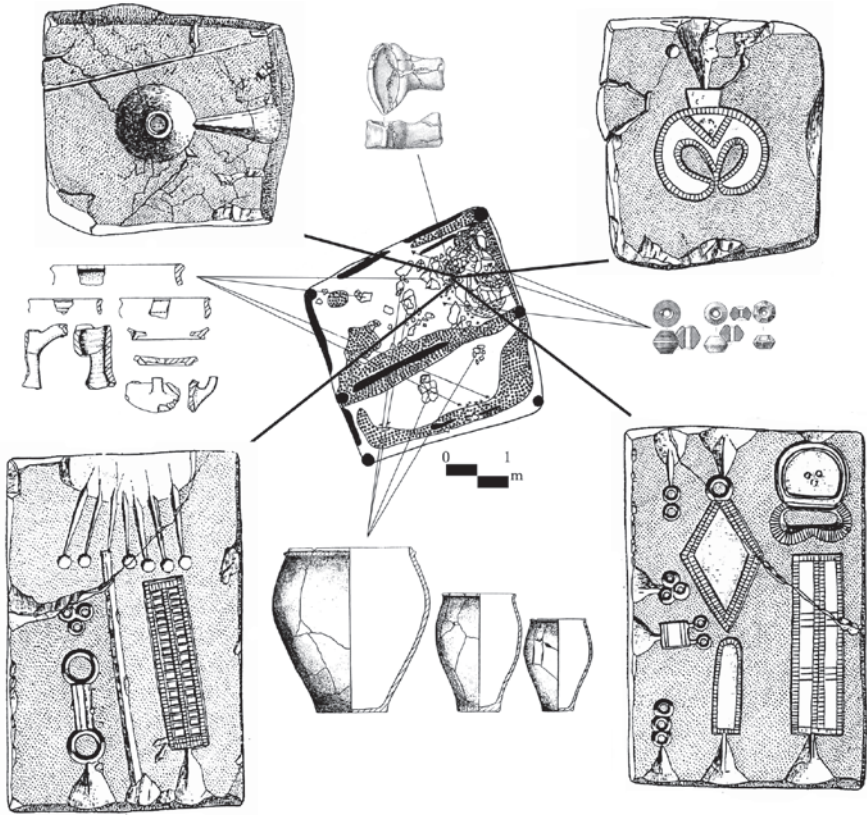


FIGURE 18 Bernashivka (Ukraine), house 36, plan with selected artifacts: four moulds for casting buckles, pendants, and dress accessory components; ladle; spindle whorls; hand- and wheel-made pottery (including fragments of amphorae)  
 REDRAWN AT DIFFERENT SCALES AFTER VYNOKUR/MEGEI (1992) AND VYNOKUR (1997)

procedure.<sup>32</sup> The procedure in question involved a technique known as “lost wax.” The two-piece mould was designed to produce a ceroplastic work, later decorated to yield the end product. The ceroplastic work was then embedded into a clay bar, which was first dried and then fired in order to melt the wax and to produce the “negative” of the desired artifact. Hot metal was then poured

32 Vynokur (1994). Not all (soap)stone moulds found in the lands to the east and to the south from the Carpathian Mountains have casting tubes and airing vents. However, Măgureanu (2008), 176 is wrong in assuming that moulds without casting tubes were used for the production of dies (as opposed to real casts). In reality, those were one-, not two-piece moulds.

into the hollow clay bar. Soon after the metal became cold, the bar was broken and the artifact thus obtained was further decorated. It is the stone mould used in the initial stage that allowed the production of another, similar (if not identical) artifact, by means of repeating the process.<sup>33</sup> This has encouraged scholars to look for analogies between dress accessories and moulds, as well as between moulds found on different sites. The results of the most recent studies strongly suggest a vast network of household-based craftsmen working in the same tradition and with the same stylistic repertoire, although located at considerable distances from each other.<sup>34</sup> This begs very interesting questions about modes of communication in the early Middle Ages, but for the purpose of this book the most important conclusion to be drawn from such studies is that household-based crafts do not necessarily imply a “primitive” economy, isolation, and parochialism.<sup>35</sup> What status those craftsmen had in their respective communities remains unknown, but it is beyond doubt that non-ferrous metallurgy was practiced at a household level, with no specialized facilities.

Quite the opposite is true for ironworking. Unlike the Carpathian Basin, blacksmith tools (hammers, anvils, tongs, mandrils, and engraving tools) and nails are relatively common finds on several settlement sites.<sup>36</sup> However, the most spectacular finds are smelting furnaces made of stone, sand, and clay. Smelting requires a temperature between 1200 and 1300 centigrades, and in order to obtain and maintain that temperature, air was forced into the furnace by means of bellows. Smelting furnaces therefore have a side (or front), tuyere opening for the induced draught.<sup>37</sup> Another opening was for removing the bloom (the metallic product of the direct process, a spongy lump of iron resulting from the chemical reactions between ore and charcoal), while the

33 For a detailed description of the lost-wax technique, see Franke (1987); Minasian (1997); Szmoniewski (2002), 121–22; Tănase (2010), 153–58. For an archaeological experiment involving the “lost wax” technique, see Shablavina (2004).

34 Szmoniewski (2017); Volodarets'-Urbanovych (2017).

35 Curta (2012), 264–65.

36 Teodorescu (1972), 85 fig. 6/1–3, 5; Bobi (1981), 107, 139 fig. 26/5, 6, and 140 fig. 27/4; Teodor (1984b), 25 and 29 fig. 6/10; Vakulenko/Prykhodniuk (1984), 66 fig. 38/8; Mitrea/Eminovici/Momanu (1986–1987), 225 and 250 fig. 17/2; Baran (1988), 110, 112, 19 fig. 11/8, 9, 12, 13, 15, and 155 pl. XLVIII/13; Mitrea/Dumitroaia/Ciubotaru (1997) 173 and 186 fig. 36/3; Popilian/Nica (1998), 14 and 20; Mitrea (2001), 25, 72, 76, 78, 80, 88, 320 fig. 60/2, 4, and 321 fig. 61/2, 3, 5, 8–10; Teodorescu (2009), 341 fig. 21/1, 2, 8, 9, 11, 14, 22; Mitrea (2015), 63. The shears occasionally found on 6th-century sites [Constantiniu (1963), 82; Baran (1988), 112 and 19 fig. 11/1; Dolinescu-Ferche (1992), 128 and 139 fig. 8/22; Popilian/Nica (1998), 175 fig. 23/4] could have been used for cutting metal, but also fleece. Only when found together with other tools or implements, could shears be associated with metalworking.

37 For for tuyeres and bellows, see Pleiner (2000), 196–214.

slag remained on the hearth, which had to be cleaned regularly.<sup>38</sup> Five such furnaces are known from settlement 5 excavated in the Budureasca Valley (in the hills above Mizil, in northeastern Walachia).<sup>39</sup> One of them had an opening on the side of the wall, which was designed for the removal of the bloom.<sup>40</sup> At Şirna (near Ploieşti, in northern Walachia), two furnaces have been dated between the mid-5th and the early 6th century, and another seven between the second half of the 6th and the 7th century.<sup>41</sup> Out of those seven furnaces, three were in open air, perhaps used only intermittently.<sup>42</sup> It is important to note that while for the 5th- to 6th-century occupation phase, only two out of 16 houses had smelting furnaces, half of all houses of the 6th- to 7th-century occupation phase had such furnaces, a clear sign of the intensification of smelting activity on the site after the mid-6th century. Four furnaces were found inside, and another outside the corresponding sunken-floored buildings.<sup>43</sup> Each had the interior covered with a thick crust rich in iron oxides, most likely from roasting. Fragments of blooms and large quantities of slag have been found inside some of those furnaces.<sup>44</sup> A very similar situation has been documented on the southeastern side of present-day Bucharest, at Lunca-Bârzeşti. One of the sunken-floored buildings discovered there during salvage excavations had a furnace with an opening on the side, just like in Budureasca. Several spongy blooms and large chunks of slags were inside the furnace, an indication that this was a smelting site, even though the associated ceramic remains point to a domestic occupation.<sup>45</sup> A second furnace was found inside another sunken-floored building from Bucharest-Lunca-Bârzeşti, filled with blooms and slag.<sup>46</sup> It remains unclear whether all those furnaces operated at the same time, but there can be no doubt that there was more than one bloomery ironwork on

38 Teodor (1996), 17–18; Tănase (2010), 92. For the working of a bloomer furnace, see Pleiner (2000), 133–36.

39 Comşa (1975), 183.

40 Teodorescu et al. (1993), 372 and 369 fig. 3/3.

41 Olteanu/Grigore/Nicolae (2007), 42–50 and 79–80.

42 Olteanu/Neagu/ Şecleman (1981), 227–28 and 228 fig. 2/a, b; Olteanu/Grigore/Nicolae (2007), 50.

43 Olteanu/Grigore/Nicolae (2007), 160 fig. 8 and 186 fig. 33.

44 Olteanu/Teodorescu/Neagu (1980), 417–19; Olteanu/Neagu (1983), 385–86; Olteanu/Grigore/Nicolae (2007), 79–80.

45 Sandu (1992), 186 and 188–89; 181 pl. XI/3.

46 Sandu (1992), 190–91. According to Olteanu (1997), 112, the metallographic analysis of iron ore remains found in Bucharest-Ciurel and in Târgovişte strongly suggests the use of the furnace with side opening, even though none is known from excavations on either site.

the site.<sup>47</sup> The 6th-century smelters in Bucharest, Budureasca, and Șirna were specialists who lived and worked permanently in settlements designed for that purpose, perhaps because of the proximity of limonite sediments, the main source of iron ore.<sup>48</sup> Smelting was done at high temperature, which implies large quantity of fuel, and all three settlements were located in densely forested areas. The fluxes that the 6th-century smelters typically used were limestone and chalk, as indicated by the analysis of slag from the settlement excavated in another area of Bucharest, at Ciurel.<sup>49</sup> Within settlement 4 excavated in Dulceanca, no furnaces have been found, but there were large amounts of slag in the filling of almost every sunken-floored building and refuse pit on the site. The metallographic analysis revealed three categories of slag, one of which has 60 percent glass with crystals of quartz and other elements, an indication of failed smelting. A second category is rich in iron (72.1 percent), but has also calcium and silicon dioxide, a typical signature for ore from sedimentary-alluvial formations in the area, most likely from the hills along the neighboring rivers Vedea and Burdea.<sup>50</sup> Slag has also been found on many other sites for which no evidence of smelting is known. Sometimes the slag was retrieved from the filling of the settlement feature, but at other times it was clearly found in an archaeological context (such as inside the oven or by its gate) that suggests ironworking activity.<sup>51</sup>

Many questions remain unanswered about the 6th-century smelters of Walachia. Why was production restricted to a few locations, and who was responsible for the subsistence and protection of the smelters in Bucharest, Budureasca, and Șirna? Did they work on commission or for some kind of domestic market? If the latter, what was the mechanism responsible for the

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47 Based on ethnographic observations, Pleiner (2000), 67 assumes that iron smelting in sunken-floored buildings was small-scale production that required no more than two persons per furnace—the “ironmaster” and his assistant. The bellows may have been operated by a third person. Those workers were probably members of the same family.

48 Pleiner (2000), 88. According to Olteanu/Neagu/Șecleman (1981), 230, the metallographic analysis of several artifacts from two settlements in Dulceanca indicates a relatively large quantity of aluminum, as well as silicon dioxide, both indicating that the source of iron were siliceous schists, which contain mineralizations of neof ormation iron oxides.

49 Olteanu (1981). Limestone was also used as flux in Șirna; see Olteanu/Grigore/Nicolae (2007), 77.

50 Dolinescu-Ferche (1992), 174–76.

51 Rafalovich (1965), 124; Roman/Ferche (1978), 87; Bobi (1981), 140 fig. 27/7; Rusanova/Timoshchuk (1984), 46; Vakulenko/Prykhodniuk (1984), 78; Corman (1994), 303; Mitrea (2001), 56; Negru/Bădescu/Cuculea-Sandu (2009), 16. According to Olteanu (1979), 583, a very large bloom (over 6 lbs.) was found in Udești. However, no furnaces are known from that site.

distribution of the iron blooms produced on those smelting sites? There are no smithies on any 6th- and 7th-century settlement.<sup>52</sup> So, did the smelters produce for individual households, in which some kind of ironworking activities were performed “on the side”? Did therefore smelters and farmers engage in some kind of exchange, either redistribution or trade? How did the blooms produced by smelters get to those settlements in which some inhabitants had the necessary skills to fashion the blooms (or the billets) into tools or weapons? With no satisfactory answers to those questions, it is difficult to gauge the social position of smelters in the 6th-century communities in Walachia and Moldavia. Even though that position does not seem to have been marked in death in the same way it was for at least some craftsmen in the Carpathian Basin, it is quite clear that smelting was an activity sufficiently important from a social point of view, for craftsmen to come together in the same settlements, and for production to be restricted to a few sites, in direct opposition to the rather diffuse character of the non-ferrous metallurgy.<sup>53</sup> It is important to note also the advanced technological procedures employed by the 6th-century smelters, especially when compared with the slightly earlier evidence from 5th-century Bohemia, where slag-pit furnaces were in use.<sup>54</sup> To judge from the existing evidence, the technology, social distinction, and separate living quarters of the 6th-century smelters in Walachia may be compared only with later, 7th- to 8th-century “service settlements” of smelters and smiths in the western parts of the Carpathian Basin and in Moldavia.<sup>55</sup>

The only other industrial activity that, like smelting, required special facilities was pottery production. Some kilns were of the up-draught type, with grates,

52 Similarly, there is abundant evidence of woodworking tools: axes [Dolinescu-Ferche (1992), 131 and 144 fig. 13/14; Teodor (2013), 23 and 116 fig. 24/5]; adzes [Constantiniu (1963), 83; Teodorescu (1971), 108 and 126 fig. 2/5; Teodor (1984b), 25 and 29 fig. 6/3; Vakulenko/Prykhodniuk (1984), 82 and 68 fig. 39/2; Mitrea (1998), 51 and 171 fig. 50/7; Mitrea (2001), 4]; wimbles [Baran (1988), 140, 19 fig. 11/14, and 159 pl. LXII/4]; and scraping tools [Morintz (1961), 660; Zirra/Cazimir (1963), 60 and 69 fig. 17/6]. However, there is nothing even vaguely resembling a carpenter’s shop.

53 Miniature vessels found in two pit cremation burials in Dulceanca and Sărata Monteoru [Dolinescu-Ferche (1992), 133 and 150 fig. 19/1; no author (1953), 85 and 84 fig. 16], have been hastily interpreted as marking graves of craftsmen comparable to burials with tools in the Carpathian Basin [Comşa (1975), 188; Tănase (2010), 82]. In reality, there is no reason to treat those miniature vessels as crucibles: no traces of metallic oxide have been found inside any of them.

54 La Salvia (2007), 31. Of prehistoric (La Tène) tradition, slag-pit furnaces are documented archaeologically only later in early medieval Moldavia; see Tănase (2010), 96–97.

55 Gallina/Hornok (2007); Teodor (2011); Török/Kovács/Gallina (2015). For “service settlements,” in general, see Curta (2009).

like in Bratei (see chapter 6).<sup>56</sup> Others had a much simpler construction.<sup>57</sup> Inside the kilns found on the northern outskirts of Bucharest, at Dămăroaia and in Dulceanca were recently fired ceramic vessels—both hand- and wheel-made—stacked in two rows, with clay rolls between them to retain the heat.<sup>58</sup> Unfortunately, no study of paste and morphology has been carried out for the ceramic materials associated with any of those kilns, in order to identify areas of distribution either within one and the same settlement or in its micro-region. There can be no doubt about the specialized character of pottery production, even though no consistent separation of production facilities from the rest of the settlement has been so far identified.<sup>59</sup>

What kind of society was that in which some farmers could also be weavers and jewelers, but smelters formed a group separate in both social and physical terms? Unlike Hungary, where Marxism had practically no influence on the archaeological research on the 5th and 6th centuries, in Romania, some archaeologists boldly engaged in the 1970s in critical discussions of Marxist theory, in an attempt to find a model of interpretation for the rapidly growing body of evidence from the excavations of settlement sites.<sup>60</sup> According to Maria Comşa, in his works, Friedrich Engels has focused only on developments in Western Europe and in Germany, such as known in the late 19th and early 20th century. New research has brought more information, especially for those societies that did not follow the classic model of development, such as those on the territory of Romania.<sup>61</sup> Encouraged by the thaw and anti-Soviet attitude of the early years of Ceauşescu's regime, but also prompted by theoretical discussions of the so-called Asian or tributary mode of production, Romanian archaeologists and historians believed that the main form of organization on the territory of Romania during the transition to feudalism was the

56 Diaconu (1958), 451 and 453 fig. 2/4; Teodorescu (1972), 94 and 76 fig. 1/1; Muscă/Muscă (1980), 423, 427–28, and 426 fig. 3; Székely (1992), 284.

57 Comşa (1981), 241 and 272; 243 fig. 1; Chirica/Tanasachi (1984), 434.

58 Rosetti (1934), 211; Dolinescu-Ferche, (1974), 71–73; 72 figs. 62–63; 74 figs. 64, 65 and 67; 75 fig. 66.

59 The kilns in Dulceanca and Cernat were located inside their respective settlements, only a few yards away from the next sunken-floored buildings [Dolinescu-Ferche (1974), 71; Székely (1992), 284]. The kiln in Băleni-Români, however, was on the northern edge of the settlement, albeit still close to a sunken-floored building; see Muscă/Muscă (1980), 423.

60 For Marxism in Romanian archaeology, see Anghelinu (2007). For Hungarian archaeology working on the early Middle Ages as hostile to Marxism, see Bartosiewicz (2016), 218.

61 Comşa (1967), 431 with n. 1. See also Báko (1975); Zaharia (1980). Well attuned to Ceauşescu's specific form of nationalist Communism, such ideas long outlived his regime, albeit without reference to Engels. See Comşa (1993); Comşa (1997); Teodor (1999); Postică (2007); Olteanu (2017).

village community (*obștea sătească*).<sup>62</sup> That form of organization supposedly appeared in Antiquity, before the Roman conquest of Dacia, “among some of the more advanced Dacian communities.” The village community survived throughout the period of Roman rule in peripheral regions, but then spread throughout the entire territory of present-day Romania during the Migration period.<sup>63</sup> Given that the migratory populations were always at an inferior level of development, they were quickly absorbed into the local village communities.

Aware of the fact that in the history of the Romanian lands there was a very large chronological gap between the end of the slave-based mode of production (coinciding with the abandonment of the Roman province of Dacia in the 3rd century) and the rise of feudalism as another mode of production (coinciding with the rise of the first feudal states, Walachia and Moldavia, in the late 13th century), Romanian historians and archaeologists were eager to elevate the village community to the status of a separate, different mode of production, which was specific to the old Romanian communities and only to them.<sup>64</sup> According to Engels, the dominant form of society during the Migration period was the *gens*, but such a society was incompatible with the monetary economy.<sup>65</sup> Romanian archaeologists pointed out numerous finds of bronze coins from 4th- to 7th-century settlement sites excavated in Romania, as well as from a large number of stray finds, and drew from that the conclusion that most exchanges in the Romanian lands during those centuries were monetary. The social formation of the communities living in the Romanian lands at that time, therefore, could not have possibly been *gens*-based. Instead, it was the social formation of the village community.<sup>66</sup> The transition from a *gens*-based society to the village-based formation was accompanied by increasing social inequality and social dissent, but the forces of production were not sufficiently

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62 For a survey of the international debates regarding the tributary mode of production, see Haldon (1993), 63–109. The debate reached Romania in the late 1960s and early 1970s, as the Romanian historians adopted the views of the Marxist sociologist Henri H. Stahl (1901–1991), whose three-volume work [Stahl (1958–1965)] had a great impact on ideas about the village community in the early Middle Ages. An equally influential book was his collection of studies in historical anthropology [Stahl (1972)]. See also Stahl (1980).

63 Comșa (1967), 432 and 434; Comșa (1970), 31, 32, and 34.

64 Zaharia (1980), 152 even opposed the village community mode of production typical for the local, native population to the Asian mode of production supposedly characteristic for the migratory populations.

65 Engels (1902), 158–166; this is chapter VII, “The *gens* among Celts and Germans,” which is available online at <https://www.marxists.org/archive/marx/works/1884/origin-family/ch07.htm>, visit of August 23, 2020).

66 Comșa (1967), 437.



developed for social class formation.<sup>67</sup> Moreover, the direct producers were free farmers, not slaves, even though prisoners of war and other captives appear in the sources pertaining to the lands north of the Lower Danube River.<sup>68</sup> Locals practiced mixed farming, with each family cultivating its own plot, which it retained in full property, together with its own animals and tools. However, all members of the village community shared the grazing fields, as well as access to other natural resources, such as woods and bodies of water.<sup>69</sup> A typical village community had between 30 to 60 nuclear families, the houses of which clustered in groups inside the village to form the residential quarters of larger, extended clans (*cete de neam*).<sup>70</sup> The leader of the village community was a “judge” (*jude, judec*), who could also exercise military power, and was assisted by a council of elders.<sup>71</sup> However, neither the “judge,” nor the elders could form a well-defined class, as their position of social prominence was not rooted in economic privilege.

The problem with this theory of the village community, which is eerily similar to Chris Wickham’s “peasant mode of production,” is that, while appealing to some historians and archaeologists, it lacks support in the archaeological and written sources.<sup>72</sup> Although most sunken-floored buildings found on 6th- to early 7th-century settlement sites are no larger than 160 square feet each (the space required for a nuclear family of five), there is absolutely no evidence of private property. Unlike the Carpathian Basin, no settlement in Walachia, Moldavia, Moldova, or southwestern Ukraine has so far produced evidence of fences or ditches marking the boundaries of households or fields. Keys and locks are conspicuously absent from the archaeological record of the Lower Danube region in the early Middle Ages.<sup>73</sup> That archaeological record cannot

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67 Comşa (1970), 42–43.

68 Comşa (1975), 199.

69 Comşa (1975), 178.

70 Teodor (1999), 105; Postică (2007), 190. The idea that groups of houses inside each settlement are the archaeological correlate of extended, patriarchal families was also embraced later by Bulgarian and Ukrainian archaeologists. See Văzharova (1986), 78; Baran (1988); Timoshchuk (1990); Baran (1997). To Rusanova/Timoshchuk (1984), 44, the spatial study of entrances into the excavated houses suggests that the community at Kodyn was a large patriarchal family, with the territorial village community emerging only later, during the 8th century.

71 Comşa (1997), 196; Olteanu (1997), 265–66 and 268.

72 For strikingly close parallels between Wickham’s “peasant mode of production” and the theory of the village community, see Wickham (2006), 304 and 536–39.

73 The earliest keys and locks known so far from Walachia are those found in an above-ground house, and a sunken-floored building, respectively, both in the 10th-century settlement at Bucov-Tioca; see Comşa (1978), 42 and 40 fig. 26/24, 27.

answer any questions regarding kinship, and proximity of buildings and other features within one and the same settlement could hardly be interpreted as indicating large, extended families. As a matter of fact, the intrasite spatial analysis of a number of 6th- and early 7th-century settlement sites in Romania and Moldova strongly suggests a very different organization and use of space, with a central, open area, and a remarkable polarization of the artifact distribution. All sites examined proved to be examples of sociopetal settlements, in which the communal front region, where activities involving the entire community may have taken place, was located in the middle. It has been also suggested that that communal front region was not only a locus of communal activity—feasts and ceremonies—but also an arena of social competition, a “beyond-the-household context” for displays of symbols of leadership.<sup>74</sup>

Equally problematic is the interpretation of 6th- and early 7th-century coins found in the lands north of the Lower Danube as an indication of monetary exchanges. In the eyes of early Byzantine authors, the population in those lands was perfectly capable of understanding the value of the imperial coins. According to the author of the *Strategikon*, the Sclavenes did not “keep those in captivity among them in perpetual slavery, as do other nations.” Instead, they were eager to release them “with a small recompense” to be paid, most likely, in early Byzantine coins.<sup>75</sup> Almost all small denominations of the bronze currency that are known from Romania have been found immediately close to the line of the Danube, that is to the “space of the market” in the Empire.<sup>76</sup> However, out of all 550 such coins so far found north of the Lower Danube, within a band of about 62 miles away from the river, the vast majority are stray finds. Even though coins found in *barbaricum* depend primarily on monetary developments in the Balkan provinces, without the archaeological context, there is no way to tell at what point in time has a coin reached the lands north of the Danube frontier of the empire.<sup>77</sup> For example, coins struck for Anastasius may well have come to Walachia under Emperor Justinian. Similarly, it has been noted that 65 percent of all coins found in present-day Romania and Moldova are folles (the highest denominations of bronze),

74 Curta (2001c), 297–307; Măgureanu/Szmoniewski (2003), 123–30; Curta (2017b), 139–41.

75 The word *misthos* implies money (*Strategikon* XI 4, 372; transl., 120). For a similar account referring to a Roman prisoner, see Procopius of Caesarea, *Wars* VII 14.15, 265. The Sclavene warriors raiding Illyricum in 551 were clearly aware of current ransom prices and the face value of the solidus, when accepting to pay “one gold *stater* per head” to the Gepids in exchange for ferrying services across the Danube (Procopius of Caesarea, *Wars* VIII 25.4–6, 317; transl., 520).

76 Gândilă (2009), 458.

77 Gândilă (2009), 455 and 458; Gândilă (2013), 335.

especially the heavy ones struck for Justinian after 538. However, such coins came to the northern Balkans, and thus became available to the population on the other side of the Danube frontier, only after Justinian's death, particularly under the reigns of Justin II and Tiberius II.<sup>78</sup> In fact, almost all 6th-century coins found during archaeological excavations are of Justinian, struck before 545.<sup>79</sup> They may well have entered the lands north of the river Danube at any point during the following 50 years or so. Moreover, it is remarkable that none of them was found in a context indicating commercial exchanges. On the contrary, a coin struck for Justinian at some point between 527 and 538 was found in house 20 in Botoșana together with a ladle and a crucible, both pointing to a local production of dress accessories. In fact, it has even been suggested that the coin in question may have been raw material for casting.<sup>80</sup> In other words, while at least some early Byzantine coins may have been obtained by means of commercial exchanges from the empire, none of them had any monetary value inside the barbarian society north of the river Danube. The relative abundance of coins is therefore to be interpreted in relation to metalworking. A similar argument may be advanced for the other category of artifacts commonly associated with trade—amphorae. Amphora shards were found on several sites south and east of the Carpathian Mountains, and where possible, the identification of those ceramic remains points to the most common types in the Balkans—LR 1 and LR 2 (see chapter 3).<sup>81</sup> There are even examples of LR 2 amphorae with pointed tips, a feature that has been used to date specimens before the mid-6th century.<sup>82</sup> However, the relative abundance of amphorae on 6th-century settlements in Walachia and Moldavia, which is in stark contrast to the contemporaneous situation in the Carpathian Basin

78 Gândilă (2012), 370, 379, and 400 (for a list of those coins found in *barbaricum*).

79 Justinian: Rosetti (1934), 210; Lăzărescu-Ionescu et al. (1954), 247; Morintz/Rosetti (1959), 33–34; Constantiniu (1965b), 188 and 189 fig. 93/2, 3; Preda (1972), 397; Teodor (1984a), 31, 37, 109 fig. 30/2, and 110 fig. 31/6, 8. For a unique coin struck for Justin II and found in Budureasca, see Teodorescu (1980), 76–77.

80 Gândilă (2009), 458.

81 Curta (2001c), 242–43 and 244 fig. 37. For an updated distribution map, see Gândilă (2018a), 47 fig. 3. Missing from Gândilă's map are the fragment found in Bucharest-Militari [Negru/Bădescu/Cuculea-Sandu (2009), 30]; and an imitation from Târgșor (near Ploiești, northern Walachia), for which see Ciupercă/Măgureanu (2010), 156–57.

82 For a whole specimen of LR 2 with a pointed tip, see Teodorescu (2009), 340 fig. 19/1. For amphora fragments from Dulceanca as possible remains of LR 2, see Teodor (2000), 325 and 336 (Anexa 3).

(see chapter 6), has been rightly interpreted as an indication of elites, not as a sign of trade.<sup>83</sup>

For elites are quite prominent in both the written and the archaeological sources. There is of course no mention in the written sources either of “judges” or of “councils of elders,” two anachronistic notions that archaeologists and historians promoting the theory of the village community have lifted up from the ethnographic literature pertaining to much later social and political developments.<sup>84</sup> Early Byzantine sources mention several warlords in the lands north of the Lower Danube. The careful analysis of the description of those men’s actions and relations to others shows that during the last quarter of the 6th century, many chiefs were competing for power. Some were warrior leaders (great men), others organizers of feasts and orators (big men), but all had achieved, not ascribed power.<sup>85</sup> Because they had to prove themselves constantly, such leaders ended up speaking and acting on behalf of their respective groups, whose identity was formed around their power.<sup>86</sup>

Although the Byzantine authors insist upon the ephemeral character of that power, it most certainly had a material culture correlate that went beyond symbols of status, such as bow fibulae, vicariously displayed on those leaders’ womenfolk.<sup>87</sup> Gold is rare in the lands north of the Lower Danube: besides a few gold coins struck for the 6th-century emperors, the only other gold find from Walachia is a small mount found in a grave in Sărata Monteoru.<sup>88</sup> Silver finds are also rare.<sup>89</sup> Some have even deplored the poverty of the settlements in Walachia, when compared to the richness of cemeteries in the Carpathian Basin.<sup>90</sup> However, an unusually large house recently discovered in Copăceanca (near Roşiorii de Vede, southern Romania) had two rows of postholes and

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83 Măgureanu (2010), 80–81. In fact, an argument may clearly be made that amphorae appear in the same archaeological assemblages that are otherwise marked by tools and implements of non-ferrous metallurgy, e.g., in Bucharest-Soldat Ghivan. See Dolinescu-Ferche/Constantiniu (1981), 319–323, 319 fig. 16/1–3 and 5, 321 fig. 17/16, and 323 fig. 19/1. It may not be an accident that that same assemblage produced evidence of cereal seed imprints onto handmade pottery.

84 Stahl (1958–1965), vol. 2, 35–99 and vol. 3, 28–33.

85 Curta (1999); Curta (2001c), 311–34.

86 Mesiarkin (2017).

87 Curta (2012), 287–91.

88 Nestor (1969), 26.

89 Constantiniu (1965a), 77–78 and 92 fig. 18; Teodorescu (1971), 109; Matei/Rădulescu (1973), 166 and 271 fig. 4; Toropu (1976), 137–138 and 213; pl. 17/1, 2; Baran (1988), 119 and 21 fig. 12/7; Fiedler (1992), 83 fig. 11/1; Curta/Dupoi (1994–1995), 217 and 219 fig. 1.

90 Măgureanu (2015), 267–68.

has been interpreted as an elite residence.<sup>91</sup> Even larger is the house with two rooms, each with its own fireplace, discovered in Udești (near Suceava, northern Moldavia). The assemblage associated with that building includes a small hoard of gold coins—one struck for Phocas, the other two for Heraclius.<sup>92</sup> This building is very different from the rather ordinary sunken-floored huts discovered on that settlement site. It was very likely an elite residence.<sup>93</sup> Some 50 miles to the northwest, across the border between Romania and Ukraine, an exceptional hoard of 7th-century Byzantine silverware found in the early 19th century in the present-day suburbs of the city of Chernivtsi may also be associated with the local elite.<sup>94</sup> Another hoard or, perhaps, burial assemblage found just outside Craiova (southwestern Romania) includes gilt silver dress accessories—two finger- and three earrings, a torc, and a bow fibula with exquisite decoration in Animal Style II, the largest specimen of its kind known so far.<sup>95</sup> How exactly could someone living in the lands north of the Lower Danube acquire *solidi* struck for Phocas and Heraclius, a silver *situla* from Byzantium, or an elegant brooch with an ornament most typical for the Early Avar age (see chapter 7)? John of Ephesus describes the Sclavene warriors of the early 580s, who have become rich and possessing “gold and silver, herds of horses and a lot of weapons.”<sup>96</sup> However, it is also possible to explain the early Byzantine silverware as gifts or bribes, much like the numerous hexagrams both in isolated and in hoard finds from southern Romania.<sup>97</sup> Irrespective of how such wealth was acquired in the first place, it does not necessarily follow that social and economic differences have sufficiently grown in the 7th century for social classes to emerge. The presence and display of wealth, especially in hoard or burial contexts, may be a desperate way to reinforce power and rally support at a time of crisis and political volatility in the turbulent decades of the early 7th century marked by the withdrawal of the Roman power from the Balkans, the siege of Constantinople, and the civil war inside the Avar qaganate.

On the other hand, the accumulation of wealth must have already started in the 6th century, for in 578, the qagan of the Avars demanded tribute from the lands north of the Lower Danube, which were “full of gold, since the Roman Empire had long been plundered by the Slavs, whose own land had never been

91 Măgureanu (2015), 271.

92 Dejan (2015), 77 and 79 fig. 3.

93 Măgureanu (2015), 271.

94 Noll (1974); Gschwantler (1993).

95 Nestor/Nicolaescu-Plopșor (1938). For the bow fibula, see also Curta (1994).

96 John of Ephesus, *Ecclesiastical History* III 6.25, 328 (transl., 249); Curta (2001c), 48–49.

97 Somogyi (2008), 141–42; Gândilă (2013), 367–68.

raided by any other people at all.”<sup>98</sup> The booty captured from the Slavs by the Byzantine troops after the campaign of 593 was considerable enough to excite protests from the soldiers, when their general, Priscus, attempted to send it all to Constantinople.<sup>99</sup> In the shadow of the Empire, the answer that the Slavene chieftain Daurentius (or Dauritas) gave to the envoys that the Avar qagan had sent to him to request payment of the tribute may have sounded like pure boasting: “Others do not conquer our land, but rather we conquer theirs. That is how it will always be, as long as there are wars and swords.”<sup>100</sup> Daurentius spoke in the name of the Slavene men whom he had presumably led to military victories. He was, in other words, a leader of Slavenes, not a ruler of Sclavinia.<sup>101</sup> However, he was definitely not the only ruler of men. Another Slavene “king” named Musocius had oarsmen at his disposal, whom he could send together with their canoes to rescue refugees from a neighboring territory raided by Priscus’ troops.<sup>102</sup> While Daurentius’ men wielded swords in war, others were busy smelting iron and forging weapons, most likely at the order and under the protection of their own rulers.<sup>103</sup>

98 Menander the Guardsman, *History* fr. 21, 195; fr. 25.1, 219; Živković (2008), 18.

99 Theophylact Simocatta, *History* VI 7.6–7, 233. This booty must have been something different from, and substantially more than just the food supplies that the author of the *Strategikon* knew that Roman troops could find in settlements north of the river Danube.

100 Menander the Guardsman, *History*, fr. 21, 194; Curta (2001c), 91.

101 For Sclavinia as the name for the Slavene land north of the river Danube, see Theophylact Simocatta, *History* VIII 5.10, 293; Curta (2011b).

102 Theophylact Simocatta, *History* VI 9.6, 237; Curta (2001c), 102.

103 It may not be an accident that at Budureasca, one of the three smelting sites so far known from 6th-century Walachia, archaeologists have found two belt mounts with analogies known only from horseman burials in western Pannonia. According to Măgureanu (2012), 318, the mounts may be dated to the exact same period in which the Slavene chiefs Ardagastus, Peiragastus, and Musocius appear in the written sources.

## Was there Nomadic Pastoralism in the East European Steppe?

The American historian Rudi Lindner was right: “Historians dislike nomads.”<sup>1</sup> He did not, but still had a hard time defining nomadism. To him, the nomads were “mounted archers,” whose “light traveling” gave them military advantage.<sup>2</sup> Lindner was right on another point as well: “to understand the history of nomads, we must exert ourselves to avoid adopting the prejudices of their literate, fleeting enemies.”<sup>3</sup> Few among those writing about the 6th-century nomads followed Lindner’s advice, if they ever read it. According to Alexander Sarantis, the fact that the Huns living in and around the city of Bosphorus disappear from the historical record after 528 is a consequence of “their nomadic lifestyle, with its seasonal movements and period raids on settled communities.” This is in sharp contrast to the “Germanic world of Pannonia ..., where the presence of relatively stable political groupings is suggested by the longevity and regularity of the names appearing in our sources.”<sup>4</sup> As if subscribing to geographical determinism, historians write of “steppe nomads” and “steppe empires,” while archaeologists insist that nomads can be identified by means of specific houses (so-called yurts), amulets, or shoes.<sup>5</sup> However, as Anatoly Khazanov has put it, to this day the scholarly community “lacks a generally accepted definition” of nomadism.<sup>6</sup> The form of nomadism that predominates in the steppe lands of western Eurasia—the locus of interaction between Byzantium and the nomads—may be best defined in economic and social terms. Pastoralism is the main, if not the only economic activity, which is based on maintaining

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1 Lindner (1982), 689.

2 Lindner (1982), 690. The year 1982 in which Lindner’s article was published also witnessed the publication of Pletneva (1982), a synthesis of many decades of archaeological research on nomadism. In 1982, Pletneva’s earlier, path-breaking study of Khazar nomadism [Pletneva (1967)] was already 15 years old.

3 Lindner (1982), 690.

4 Sarantis (2016), 37–38.

5 For “steppe nomads” or “nomads on horseback,” see Syrbe (2012); Kardaras (2014). For recent developments in the archaeology of the East European nomads, see Komar (2015). For yurts, see Nechaeva (1975); Kazanski (2012). For amulets, see Tentiuc (2009). For shoes, see Komar (2010).

6 Khazanov (2003), 26. For a recent survey of scholarly attempts at pinpointing the key features of nomadism, see Potts (2014), 1–46.

herds throughout the year in free-range pastures.<sup>7</sup> That implies seasonal movement within the boundaries of specific grazing territories, and that movement involves the entire population, and not just one of its segments. Nomadism, in other words, is not transhumance.<sup>8</sup> The society of the pastoral nomads in the Eurasian steppes is based on kinship, but also on “various segmentary systems and genealogies, whether real or spurious.”<sup>9</sup> Khazanov noted that in order for pastoral nomadism to emerge as a viable, long-term economic alternative, favorable external socio-political conditions had to exist. Those were made possible by neighboring, sedentary societies that had a certain level of economic development, stratified social systems, and state organization. Khazanov’s remarks invite a re-examination of the historical evidence pertaining to the 6th- and 7th-century steppe lands of Eastern Europe. While the history of the peoples in the lands north of the Black Sea during Late Antiquity, especially the Huns, has been the subject of a few recent books, there has been very little interest in the post-Hunnic history of the region, even though much has been written on the sources of that history—from Priscus to Menander the Guardsman—and the abundant results of the archaeological research in the southern parts of the present-day Republic of Moldova and Ukraine, as well as Russia.<sup>10</sup>

One of the earliest sources dealing with the steppe lands north of the Black Sea in the 6th century is Jordanes’ *Getica*. Jordanes regarded the Black Sea

7 The word “nomad” derives from the Greek verb *nomeuo*, which means “to drive afield” or “to tend a flock” (by taking it to the grazing field, the *nome*). A nomad is essentially a shepherd (*nomeus*).

8 For the conceptual distinction between pastoral nomadism and transhumance (“yaylag pastoralism”), see Khazanov (1994), 16 and 23.

9 Khazanov (2003), 27.

10 For the Huns, see Bóna (2002); Batty (2007); Kim (2013); Kim (2016). None of those books discusses the pastoralist economy in the 6th and 7th century. Bóna (2002), 28–33 rightly blames historians for overusing ethnographic parallels (particularly with the 19th-century Kyrgyz), but has nothing to say about Hunnic pastoralism. The section on the “phenomenon of nomadism” in Batty’s book [Batty (2007), 138–145] includes inappropriate parallels to the “American Plains Indians, such as the Blackfoot and Cheyenne,” Mongol proverbs, as well as references to Ibn Khaldun’s *Muqaddima*, and accounts of the 16th-century “nomadic lifestyle” in the Volga steppes, but absolutely no historical or archaeological information regarding nomadism in Late Antiquity or the early Middle Ages. The assumption, of course, is that nomads remained essentially the same throughout history from the Scythians to the Nagayans. To Kim, “the so-called ‘nomads’ of Eurasian steppe history were peoples whose territory/territories were usually clearly defined, who as pastoralists moved about in search of pasture, but within a fixed territorial space.” Nonetheless, Kim (2016), 4 believes that the Huns were “a heterogeneous *agro*-pastoralist society” (emphasis added). For a few studies dedicated to the post-Hunnic steppe lands of Eastern Europe, see Kazanski (1993) and Galkina (2005).





FIGURE 19 Principal sites mentioned in the text and in the notes (ancient names in italics)

steppe as the region from which the Huns, “like a fruitful root of bravest races, sprouted into two hordes of people—Altziagiri and Sabiri—each with different dwelling places.”<sup>11</sup> While the Sabiri are also known from Priscus, the Altziagiri do not appear in any other sources.<sup>12</sup> According to Jordanes, they lived “near Cherson,” but in the summer “ranged the plains, their broad domains,” returning to the Black Sea shore in the winter (Fig. 19).<sup>13</sup> Whoever the Altziagiri were, the mention of Cherson is important, because the city is also said to be the place where traders bring in goods from Asia (see chapter 5). In other words, the Altziagiri are explicitly associated with an urban and commercial center.<sup>14</sup> There is no such association in Procopius’ description of the Black Sea in Book VIII of the *Wars*, which was written most likely in or shortly after 554.<sup>15</sup> Instead, Procopius specifically mentions that “all nations of the Huns are settled” in the steppe lands north of the Caucasus Mountains, “extending [westwards] as far as the Sea of Azov.”<sup>16</sup> In spite of the common opinion on the matter, Procopius does not describe nomads moving around in the steppe lands. The

11 Jordanes, *Getica* v 37, 63; transl., 50.

12 According to Kim (2016), 138, the name of the Altziagiri is “simply a corruption of the Hunnic term Alt/Ult-zin-cur, a reference to the title borne by the aristocratic lords of the Hunnic supreme council of the six lords.”

13 Jordanes, *Getica* v 37, 63; transl., 50. For Sabirs in Priscus and other sources, see Galkina (2005), 66; Golden (2011), 146–47.

14 This reminds one of what John Malalas *Chronographia* XVIII 14, 250, had to say about the Huns of King Grod, who resided “near Bosphorus,” that is not far from another important commercial center on the northern coast of the Black Sea.

15 Brodka (2013), 17; Greatrex (2003), 52–57.

16 Procopius of Caesarea, *Wars* I 10.6, vol. 1, 78; transl., 23.

Utigurs are said to have settled in the lands to the east of the Maeotis (Sea of Azov).<sup>17</sup> The only mention of nomads in Procopius' work is in reference to the Ephthalites (White Huns), who "are not nomads like the other Hunnic peoples, but since ancient times have been established in fertile lands."<sup>18</sup> It is important to note in this context that, although regarding the "Hunnic people" as nomads when distinguishing them from the Ephthalites, Procopius has nothing to say about nomadism when describing the Huns. Agathias of Myrina, writing in the late 570s or early 580s, knew that "all the other Hunnic tribes were still at the height of their fame though for some reason best known to themselves they had chose to move south at this time and had encamped not far from the banks of the Danube."<sup>19</sup> The passage serves as an introduction to Agathias' account of the Cutrigur devastating invasion of 558/9, during which, after crossing the frozen Danube as if on a bridge, the Hunnic horsemen under the leadership of Zabergan reached the outskirts of Constantinople.<sup>20</sup> There is nothing about Hunnic nomadism in Agathias' *Histories*.

An appendix attached in the mid-6th century to the epitomized Syriac translation of the now lost *Ecclesiastical History* of Zachariah of Mytilene, contains a list of 13 ethnic names largely based on Priscus, in addition to a few new names, one of which is *Korthrigor* (Cutrigurs). No mention is made of where those people lived, but they are all said to be tent-dwellers who eat "the meat of cattle, fish, and wild animals,"<sup>21</sup> The Syriac author's listing of Cutrigurs among the tent-dwellers reminds one of a slightly later source—Menander the Guardsman. Writing under Emperor Maurice (582–602), his now lost *History* survives in fragments incorporated into *De legationibus* and *De sententiis*, two collections compiled under Constantine VII Porphyrogenitus in the mid-10th century. In one of those fragments, Menander mentions the leaders of the Cutrigurs, Zabergan, who appears also in Agathias of Myrina's work. Emperor Justinian is said to have put pressure on Sandilkh, the leader of the Utigurs, to attack Zabergan and destroy the Cutrigurs. Sandilkh refused to attack those

17 Procopius of Caesarea, *Wars* VIII 5.22, vol. 5, 95; transl., 471.

18 Procopius of Caesarea, *Wars* I 3.3–4, vol. 1, 14; transl., 6. For a Herodotean hint in this passage, see Kaldellis (2004), 73–74.

19 Agathias, *Histories* v 11.5, 177; transl. 146. The only time Agathias employed the word "nomads" was in (negative) reference to the Franks, and not to any people from the steppe lands (*Histories* I 2.3, p. 11).

20 Bakalov (1974); Sarantis (2016), 335–45. The verb that Agathias employs to express the idea of Cutrigurs encamping near the northern bank of the Danube (*aulizomai*) commonly applied to soldiers bivouacking. Pace Kardaras (2014), 71, that verb does not, in and by itself, connote nomadism.

21 Pseudo-Zacharias Rhetor, *Chronicle*, 452. For Priscus as a source of Pseudo-Zacharias Rhetor, see Czeglédy (1971), 141.

whom he regarded as his fellow tribesmen: “For they not only speak our language, dwell in tents like us, dress like us, and live like us, but they are our kin, even if they follow other leaders.”<sup>22</sup> He offered a compromise: instead of destroying the Cutrigurs, he would attack them to take all their horses, “so that without their mounts they will be unable to pillage the Romans.”<sup>23</sup> There was apparently a common Cutrigur-Utigur culture, of which the tents were an important component. However, there is no indication that tent-dwellers like the Utigurs and the Cutrigurs were nomads. The reference to horses is quite clearly meant to point out that Cutrigurs fight on horseback. To take their horses, therefore, is not to inflict damage onto their pastoralist economy, but to prevent them from waging war against the Empire. The words that Menander put in Sandilikh’s mouth are those that educated Romans could have uttered. Similarity of language and customs is significant to those who know from ancient ethnography that that similarity also implies the same ways of waging war. That Menander, like Procopius, was counting on his audience’s knowledge of, and ability to recognize his allusions to Herodotus’ archetypal Scythians results from another fragment, in which an Avar envoy asks Emperor Tiberius II: “Do you not have writings and records from which you can read and learn that the tribes of Scythians are impossible to defeat and conquer?”<sup>24</sup> Menander the Guardsman’s Avars may appear as Scythians, the quintessential nomads of Antiquity, but that comparison was never made either with the Cutrigurs or with the Utigurs.

The conclusion seems inescapable. Leaving aside Jordanes’ mention of the Altziagiri, no 6th-century author dealing with the steppe lands north of the Black Sea mentions anything about nomadism. Jordanes, on the other hand, mentions a seasonal movement between the steppe lands and the seashore in relation to a group, the Altziagiri, which is not mentioned in any other source. The Altziagiri are specifically mentioned in relation to Cherson and other authors make the same association between Huns and Roman cities on the coast. What then was the basis for treating the northern neighbors of the Empire as nomads? Why are historians so interested in perpetuating an ethnographic stereotype ultimately derived from Herodotus’ description of the Scythians?

The movement of the Altziagiri from the seashore to the steppe lands in the interior may be interpreted as an indication that in Antiquity and the early Middle Ages, the Black Sea lowlands offered optimal conditions for

22 Menander the Guardsman, fr. 2, 42 and 44; transl., 43 and 45.

23 Menander the Guardsman, fr. 2; transl., p. 45; Kardaras (2016), 249.

24 Menander the Guardsman, fr. 15.3, p. 150; transl., p. 151.

pastoralism, albeit more of a transhumant than nomadic kind. There are three main areas in which transhumant pastoralism was not only possible, but actually practiced successfully in more recent historical periods: the Bugeac Plain to the northwest, the central Black Sea lowlands (including the Crimean lowlands), and the Kuban lowlands (the Prikubanskaia Nizemnost' to the northeast). The latter two are separated by the Sea of Azov, at the northeastern end of which, particularly around the Taganrog Bay and along the Northern Donets and its main tributaries (especially the Kalitva), a relatively large number of sites have been identified by means of field surveys. Because they are located deep into the interior of the steppe lands, and under the assumption that those were the lands controlled by nomads, all those sites have been interpreted as campsites, even those located directly on the seashore. However, and despite the fact that none has so far been systematically excavated, the field surveys have produced abundant ceramic material, including amphora shards, some of which may be dated to the 6th or early 7th century.<sup>25</sup> Amphora shards and 7th-century Gray Ware of the so-called Kantserka type (see below) have also been found on a number of sites in Left Bank Ukraine, in the region of the Poltava.<sup>26</sup> Besides field survey, trial excavations were carried out on some of those sites. However, because of the absence of any building structures, they were also interpreted as campsites and dated to the 7th century.<sup>27</sup> It is important to note that no bone assemblages have been found, and no indications of the subsistence economy on those sites.<sup>28</sup>

Contemporaneous settlement sites are known from the Lower Dnieper region in the central Black Sea lowlands. Salvage excavations carried out in the 1950s in Ihren' (now on the northeastern side of the city of Dnipropetrovsk, Ukraine) have produced dress accessories—bracelets, fibulae, and belt fittings—the dating of which suggests that the earliest occupation on the site may be of a mid- to late-6th-century date.<sup>29</sup> Stray finds from the Kyzlevo island (next to Vasylivka-na-Dnipri, now under the water of the Dniprovsk'ke

25 Pletneva (1964), 3 and 7. Given the abundance of the ceramic material, one wonders if the occupation on those sites was truly impermanent (i.e., whether they were truly campsites); see Flerov (2012), 26. On the other hand, with no materials properly published, it is impossible to verify the dating of the pottery. For much later, true campsites in that same region, see Vorob'ev/Larenok (2014).

26 Kazanski (1987), 87, 88 fig. 15/1, and 89 fig. 16/3–5, 7, 8, 12–17; Kazanski (2013), 802–04.

27 Kazanski (2013), 802.

28 For an example of the kind of archaeological data pertaining to economic activities that could otherwise be retrieved from a true campsite, see Kliuchnikov (2013). For the archaeology of pastoral nomadism, in general, see Honeychurch/Makarewicz (2016).

29 Berezovets' (1963), 195–97; Prykhodniuk (1998), 157; 140 fig. 71; 141 fig. 72.

reservoir) may well be of the same date.<sup>30</sup> Similar materials are also known from Zvonets'ke (across the confluence of the Dnieper with the Voronyi River) and Volos'ke (near the confluence of the Dnieper with the Mokra Sura River).<sup>31</sup> All those were most likely permanent settlements, not campsites. However, the closest analogies for the materials found there are not only in the Crimea, but also in the Balkans. In other words, those bracelets, fibulae and belt fittings are either of Byzantine origin or imitations of artifacts from the Empire. That the latter were indeed possible results from the occasional traces of casting activities, such as the ladle from Volos'ke.<sup>32</sup> Finds of clay pans suggests the consumption of cereal-based foods, but there is no indication of agricultural activities.<sup>33</sup> Nothing is known about assemblages of animal bones.

There are no settlements of any kind in the Bugeac, at the westernmost end of the Black Sea lowlands, between the Danube and the Dnieper rivers. The region has been the object of several systematic studies regarding the material culture correlates of nomadism for various periods in history, from the Bronze Age to the late Middle Ages, but no 6th- to 7th-century campsite or village has so far been identified. As a matter of fact, a 125-mile wide belt separated the nearest points on the early Byzantine frontier on the Lower Danube or in the Crimea from the first settlements to the north, all of which appear at the interface of the Black Sea lowlands with the Bârlad, Cogâlnic, and Podolian uplands. However, many 6th-century coins are known from the Bugeac, and at least some of them may have been associated with settlements and campsites that have yet to be identified archaeologically.<sup>34</sup>

Out of 42 coins known so far from the Black Sea lowlands, only seven have been found to the east from the river Dnieper. The contrast with the region of the Sea of Azov is also evident. Out of seven finds from that area, four are hoards of gold coins, three of them within a relatively small area of the Luhansk-Donetsk region. The fact that all coins from the Biloiarivka hoard are 20-carat, light-weight solidi struck for Emperor Justinian, all of the same date, strongly suggests that that collection did not exchange too many hands before

30 Bodianskii (1960), 276 and 277 fig. 4/2 and 8. In addition, a hoard of dress accessories has been recently found in Solontsi, across the Lower Dnieper near Kherson (Ukraine): Ganoshchenko/Volodarets'-Urbanovych (2019).

31 Berezovets' (1963), 197; Prykhnodniuk (1998), 156 and 157; 142 fig. 74/4, 9, 10; Bodianskii (1960), 274 and 275; 273 fig. 1/7.

32 Smilenko (1969), 162.

33 Clay pans: Bodianskii (1960), 275 and 276; Telegin (2001), 25 and 24 fig. 6. According to Gorbanenko/Pashkevich (2010), 56 and table 2.10, the only cereal seeds found at Bogorodychne (near Slov'ians'k, in southeastern Ukraine) are of millet.

34 Curta (2008), 174 and 173 fig. 8.

reaching the Azov Lowlands.<sup>35</sup> This may well be a payment or a bribe sent from Constantinople for some chieftain in the region. Whether or not that chieftain was Utigur is impossible to establish, but it is likely that the three hoards signal a local center of power. That conclusion is substantiated by finds of Sassanian silverware.<sup>36</sup> Two burial assemblages on the shores of the Sea of Azov—one found at Morskoi Chulek (near Taganrog, Ukraine), on the northern shore, the other at Dzhiginka (one the eastern side of the Taman Peninsula), near the southeastern shore—stand out among all contemporaneous assemblages in the steppe lands by means of their wealth and exquisite ornamentation of the associated dress accessories.<sup>37</sup> In that respect, they are directly comparable to hoards of early Byzantine gold coins discovered farther to the north. As a matter of fact, some, at least, of the grave goods in Dzhiginka and Morskoi Chulek may well be of Byzantine manufacture and could thus have been procured directly from Constantinople, possibly by means of imperial gifts. This is definitely the case of the ceremonial coin (a rare solidus struck for Justin I and Justinian at some point between April and August 527) mounted into the chain clasp from Dzhiginka, and of the bracelet with Latin inscription from Morskoi Chulek.<sup>38</sup>

While exceptionally rich burials dated to the 6th century appear to the east from the Sea of Azov, most other contemporary assemblages are to the west from that sea. Late 6th- and early 7th-century burials in the steppe lands cluster in northern Crimea and around the Dnieper estuary. The pits of four out of nine graves dated to the 6th century, and 23 out of 35 graves of a late 6th- or early 7th-century date have been dug into prehistoric, primarily Bronze-Age mounds. Although several mound burials are known from the previous, “Hunnic” period (late 4th to first half of the 5th century), none is described as being in a Bronze- or Iron-Age mound. The 6th- to 7th-century burials may not be the only medieval instance of prehistoric barrow use, for the practice is also well documented for the 10th to 13th centuries. However, it appears that that

35 Kropotkin (1962), 36; Gândilă (2018a), 265 with n. 94.

36 For the 5th- or early 6th-century bottle with four female dancers, in which the gold coins from the Lyमारivka coins have been found, see Trever/Lukonin (1987), 112, 121 and 122; pls. 42–46. The Persian origin of the bottle is betrayed by two inscriptions. For the coins, see Kropotkin (1962), 35. For the Sassanian ewer decorated with a semurv from Pavlivka, see Trever/Lukonin (1987), 113 and 122; pls. 54–56.

37 For Morskoi Chulek, see Zaseckaia et al. (2007), 10 and 161–67; 36 fig. 12/5, 6; 61 fig. 20; 76 fig. 28; and pls. 11–VIII. For Dzhiginka, see Kondakov (1896), 193–95 and 200–02; 193 fig. 104; 194 fig. 105; 1095 fig. 106; 201 fig. 115; Zaseckaia (2010), 123–32.

38 Zaseckaia et al. (2007), 36 fig. 12 and 170 pl. 111/4, 5. A Byzantine origin may also be attributed to the fragment of silk fabric from the “princely” burial in Hlodosy (Kirovograd region, Ukraine), for which see Smilenko (1965), 21.

practice started in the 6th century. It is worth noting that not all prehistoric mounds were reused for the early medieval burials. Although there are many thousands of prehistoric barrows in the steppe lands north of the Black Sea, only some were selected for re-use. Within one and the same group of barrows (e.g., at Bogachivka or Khrystoforivka) only a few, often no more than a couple received new burials.<sup>39</sup> Most prehistoric mounds have no more than one early medieval, secondary burial, often placed in the center of the barrow. This strongly suggests a careful choice of site for the early medieval burials. Judging from the existing evidence, the people in the Black Sea steppe lands regarded prehistoric mounds as “old,” and therefore chose to bury some of their dead in barrows. Such practices may have been connected with claims to the ancestors supposedly buried underneath the mounds.<sup>40</sup> At the same time, the idea of placing the dead in prehistoric mounds may have something to do with the desire to make their tombs visible in the landscape, and thus to communicate the status of an individual or a family.<sup>41</sup> In the steppe lands north of the Black Sea, burial within a prehistoric mound was probably meant to conjure the (imagined) past in order to re-invent traditions. Those who buried their dead in prehistoric mounds may have done so in order to strengthen the ideologically based claims to territory by means of affective and positive religious ties to the tombs of the ancestors—both those who had indeed been buried in the prehistoric mounds in the 6th and early 7th century, and those imagined as laying under those barrows since time immemorial.

It cannot be an accident of research that, with the exception of a few children, almost all those who were buried under prehistoric barrows in the Black Sea lowlands were men buried with weapons, primarily arrowheads and, occasionally, swords or sabers.<sup>42</sup> Some of those men may have been leaders of communities, like those leading migrations into the Empire. Procopius mentions Sinnion, a veteran of Justinian’s wars against the Vandals in Africa and the Goths in Italy. In the mid-6th century, he was the head of a large group

39 For Bogachivka, see Rashev (2000), 18–19; 121 fig. 15/1–14. For Khrystoforivka, see Prykhodniuk/Fomenko (2003).

40 Brather (2009), 263.

41 Pedersen (2006), 351.

42 For swords, see Grinchenko (1950), pls. II/13–14, IV/5–6, 9–10; V/8; Kukhareno (1952), 39 and 40 pl. II/10; Aibabin (1985), 191–96; 192 fig. 1/5; Orlov/Rassamakin (1996), 103–13; 109 fig. 5/1, 3, 5, 6, 9; 110 fig. 6; Rashev (2000), 24–25; 137 fig. 31/14; 138 fig. 32/17; Prykhodniuk/Khardaev (2001), 585–603; 588 fig. 1/1, 2; Komar/Kubyshev/Orlov (2006), 245–51 and 267–301; 280 fig. 18; Komar/Khardaev (2012), 243–44, 249–50, 257–58, 259–60, 262, 263–64, and 267–77; 273 fig. 16/1, 2. For sabers, see Smilenko (1965), 22 fig. 15/3; pls. VI/4–5 and VI/6; Werner (1984), pls. 13/41 and 29/7. None of those blades has so far been the subject of metallographic analysis.

of 2,000 Cutrigurs—men, women, children—who petitioned the emperor to settle in Thrace.<sup>43</sup> There is no mention of any sheep or cattle that they may have brought with them. When accepting them into the empire, Justinian must have been well aware that those were not nomads, otherwise they could not have adapted to the environmental conditions in Thrace, which were completely different from those in the steppe lands north of the Black Sea. Thrace was a rich agricultural land, with many cities. The Cutrigurs were apparently regarded as quite capable of adapting to their new home.

If the Cutrigurs migrated to the empire in the company of their wives and children, why aren't there more female burials in the steppe? If those were burials of nomads roaming in the steppe lands between the Danube and the Volga rivers, where were their children and women that appear in the written sources? There is also very little evidence to support the idea that those were communities whose economy of subsistence was primarily, if not exclusively pastoralist. Several burial assemblages include sheep bones, typically the legs of the animal placed next to the human skull.<sup>44</sup> Faunal remains are mentioned for a number of settlements in the northern and northwestern Black Sea region, but unfortunately no analysis has been so far carried for any of them. A number of buildings of circular plan found in some of those settlements have been interpreted as “yurts” on the basis of ill-thought analogies with Kalmyk *kibitkas* (tents) known from 19th-century ethnographic reports.<sup>45</sup> However, some of those settlements with “yurts” are also known for paleobotanical samples indicating the cultivation of cereals, which runs against the idea of (pastoral) nomadism (see chapter 12).<sup>46</sup> The ceramic assemblage in house 4 in Osipivka, a yurt-like building, included fragments of clay pans used for the baking of flat loaves of bread (Fig. 20).<sup>47</sup>

Soviet, Russian, and Ukrainian archaeologists typically opposed the settlement sites in the north (which they attributed to the Slavs, a sedentary population) to the burial sites in the steppe lands (which they attributed to the nomads). In fact, there are more indications of commonality than difference. The same types of belt buckles and strap ends are known from both burial and

43 Procopius of Caesarea, *Wars* VIII 19.7, 244; Sarantis (2016), 290–91 and 303.

44 Smilenko (1965), 12; Beliaev/Molodchikova (1978), 89; Orlov/Rassamakin (1996), 106; Gavrilov (2000), 109; Rashev (2000), 19 and 24; Komar/Kubyshev/Orlov (2006), 271, 315, 323, and 340; Khardaev (2015), 108. The raising of sheep is implied by finds of woolen fabric in Hlodosy, for which see Smilenko (1965), 15.

45 Georgiev (2007), 23; Kazanski (2012). See also Flerov (1996).

46 Pashkevich/Gorbanenko (2010), 115 with table 10. According to Tuganaev/Tuganaev (2007), 35 the most important crops at Osipivka were millet and barley.

47 Prykhodniuk (1990), 94 and 101 fig. 6.



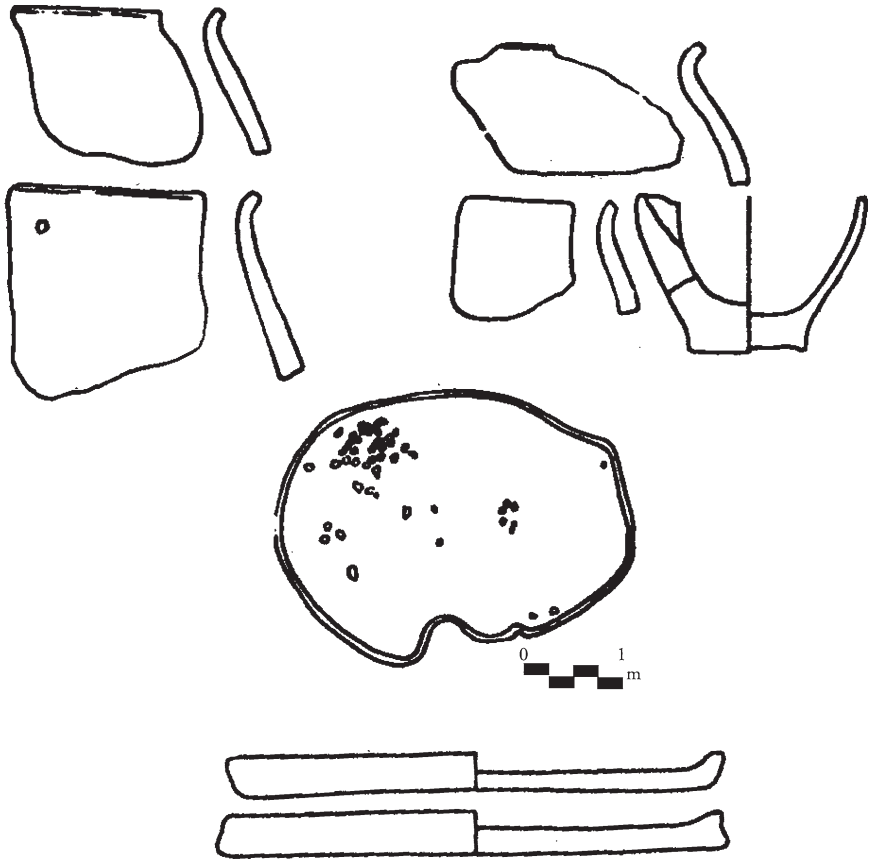


FIGURE 20 Osipivka (Ukraine), house 4, plan and associated artifacts—fragments of handmade pottery, including clay pans. Redrawn after Prykhodniuk (1990)

settlement sites.<sup>48</sup> Three-edged arrowheads typically interpreted as “nomadic” are also known from both settlement sites and mound burials.<sup>49</sup> Bridle bits

48 Belt buckles: Viaz'mitina et al. (1960), 196 fig. 74/6; Prykhodniuk (1998), 143 fig. 75/9; Rashev (2000), 138 fig. 32/9; Komar/Kubyshev/Orlov (2006), 269 fig. 13/20, 21. Strap ends: Prykhodniuk (1998), 141 fig. 72/3, 4; Rashev (2000), 121 fig. 15/3, 4. There are many parallels in hoards from forest-steppe region for the dress accessories recently found in the steppe region; see Ganoshchenko and Volodarets'-Urbanovych (2019).

49 Grinchenko (1950), pl. 11/1-3, 5, 6; Kukhareno (1952), 40 pl. 11/6; Bodianskii (1960), 277 fig. 4/6, 9; Berezovets' (1963), '195; 197 and fig. 24/9; Smilenko (1965), 24 fig. 19/2, 3 and 30 fig. 25/1, 2; Rashev (2000), 137 fig. 31/21; Prykhodniuk/Fomenko (2003), 111 fig. 2/7-10; Komar/Kubyshev/Orlov (2006), 284 fig. 19/1-14, 313 fig. 32/32-35, 332 fig. 39/1-3, 6, 7; Komar/Khardaev (2012), 274 fig. 17/3.

have been found in burial as well as settlement assemblages.<sup>50</sup> Nonetheless, the most important link between burial and settlement sites is the pottery. All handmade pots found in burial assemblages in the steppe belt north of the Black Sea belong to Tivadar Vida's class IIID 1, several specimens of which are typically decorated with finger impressions on the rim.<sup>51</sup> Ever since István Bóna identified this category in Early Avar ceramic assemblages (see chapter 7), Hungarian scholars have regarded the pottery with finger impressions on the rim as an index fossil for the migration of the nomads from the steppe north of the Black Sea.<sup>52</sup> As a consequence, the issue of where and how this kind of pottery was produced has been rarely, if ever, tackled. Although there is so far no direct evidence, it is likely that the pottery with finger impressions on the rim was produced at settlements on the southern border of the forest-steppe belt, and not at any campsite in the steppe. While only provenance studies may lead to serious research in that direction, it is important to note for the moment the striking morphological parallels between pots found on burial and settlement sites. Pots with relatively long necks and out-flaring rims with no decoration, similar to those found in Adzhigiol, Chornomors'ke, and Rysove are known from Pen'kivka and Stetsivka.<sup>53</sup> Pottery with finger impressions on the lip, such as found in Bogachivka, Khrystoforivka, and Natashyne, appears in ceramic assemblages from Hansca and Stetsivka.<sup>54</sup> Finally, pottery with vertical combed decoration, such as found in Velykyi Tokmak, is known from two sunken-floored buildings in Dodești.<sup>55</sup> There are even sickles deposited in burial assemblages at Novopokrovka (near Kharkiv, Ukraine).<sup>56</sup> Their closest

50 Grinchenko (1950), pl. 1/5–7; Kukhareno (1952), 38 pl. 1/1 and 40 pl. 11/1; Smilenko (1965), 31 fig. 26/4, 5; Shchepinskii (1968), 176; Khavliuk (1974), 202 fig. 11/26; Kovpanenko/Buniatin/Gavriliuk (1978), 49; Aibabin (1985), 192 and 198; 192 fig. 1/1; Aibabin (1991), 29; Rashev (2000), 24; Komar/Kubyshev/Orlov (2006), 299 fig. 26/3; 313 fig. 32/30; Komar (2008), 97; Komar/Khardaev (2012), 259.

51 Vida (1999), 138–43.

52 Bóna (1973), 77–78.

53 Berezovets' (1963), 178 and fig. 16/4; Petrov (1963), 223 fig. 8/2; Rashev (2000), 27; 117 fig. 11/10, 14; 132 fig. 26/13; 138 fig. 32/4; Komar/Orlov (2006), 390 fig. 2/7 and 394 fig. 4/13.

54 Prykhodniuk (1980), 57 fig. 34/1; Chebotarenko/Tel'nov (1983), 94 fig. 4/4; Tel'nov/Riaboi (1985), 116 fig. 6/1; Rashev (2000), 121 fig. 15/12 and 135 fig. 29/4; Prykhodniuk /Fomenko (2003), 109 fig. 1/4. Such pottery also appears on early Byzantine military sites in northern Dobruđa; see Comşa (1970), 324 fig. 1/9.

55 Smirnov (1960), 175 fig. 128/9; Teodor (1984b), 47 fig. 19/1–3, 5, 6.

56 Kukhareno (1952), 38 pl. 1/3 and 40 pl. 11/7. A spade frame was found together with an adze in a "princely" tomb in Hlodosy; see Smilenko (1965), 24 fig. 19/11.

analogies are from settlement sites on the southern border of the forest-steppe belt, such as Stetsivka, Hansca, and Bil'sk.<sup>57</sup>

The archaeological evidence thus suggests that the 6th- and 7th-century burials in the Black Sea lowlands were not of nomads coming from afar, but of members of communities that occupied the settlements at the interface between the steppe and the forest-steppe belts. Whether or not these men died during the seasonal migrations associated with transhumant pastoralism, their burials were not graves of pastoralists, but monuments of power and prestige. Finds of the 6th and 7th centuries in the steppe lands have been classified as belonging to one of Anatolii K. Ambroz's groups IV, V, and VI. Group IV, which Ambroz viewed as representing the "lower class," the "commoners" of the steppe society, consists of burials with no weapons, but with buckles, mounts and strap ends with openwork ornament, which could be dated to the late 6th or early 7th century. By contrast, group V includes extraordinarily rich burials, such as Kelegeia. Finally, Ambroz included in his group VI burial assemblages such as found in Syvash's'ke and Kovalivka, in which a human (often a male) was buried together with a horse or parts of a horse skeleton (skull and legs). To Ambroz, those were the warriors of the steppe society.<sup>58</sup> Ambroz's tripartite scheme, a rather simplistic model of Marxist inspiration, has not been adopted by more recent studies, from which the issue of the social status is absent.<sup>59</sup> This is truly surprising, as the steppe lands of Eastern Europe produced some of the richest burial assemblages of 7th-century Europe. To Joachim Werner, the only parallel to the sumptuous burial of Kuvrat in Malo Pereshchepyne was Raedwald's tomb under Mound 1 in Sutton Hoo.<sup>60</sup> Like Sutton Hoo, Malo Pereshchepyne produced a complete set of drinking (ewer, amphora, goblets, cups, and bowls) and washing vessels (basins, ewers, or buckets) pointing to

57 Petrov (1963), 218; 222 fig. 6/6; Rafalovich (1965), 96 fig. 4, 5; Shramko (1980), 76 fig. 3/1. Another sickle has been found in a sunken-floored building at Kochubiivka (near Uman', Ukraine); see Prykhodniuk (1990), 89.

58 Ambroz (1981); Orlov (1985); Baran/Kozlovs'kyi (1991), 235.

59 Kazanski (2013); Komar (2013), 31–52. The only discussion of social status is in reference to belt sets, elements of which occasionally appear in burial assemblages; see Skyba (2016), 80–92.

60 Werner (1985), 711–12. In at least one respect, Werner's parallel between Malo Pereshchepyne and Sutton Hoo is valid: in both cases, no human bones have been found, and, as a consequence, both burials have been interpreted as cenotaphs. The identity of the person for whom the memorial burial was performed in Malo Pereshchepyne has long been disputed—whether Kuvrat, "the chieftain of Bulgaria and of the Kotragoi," mentioned by Theophanes the Confessor in the early 9th century, or someone else. The attribution was promoted by Werner (1984) and Werner (1992). It was initially disputed on methodological grounds, but recently seems to be accepted by most scholars.

possibly diplomatic gifts or some other form of Byzantine imperial largesse targeted at some important barbarian leader. In that respect, however, Malo Pereshchepyne and the related finds in the steppe lands dated to the second half of the 7th century are substantially different from Morskoi Chulek and Dzhiginka. Instead of a single ceremonial coin mounted in a chain clasp, the assemblage in Malo Pereshchepyne includes an entire necklace made of Byzantine coins, the latest of which are 18 light-weight solidi struck for Emperor Constans II between 642 and 646.<sup>61</sup> Since all coins are perforated or with attached loops, the exact date of the Malo Pereshchepyne assemblage has been a matter of much dispute.<sup>62</sup> Nonetheless, since solidi struck for the same emperor at that same time were also the latest coins found in other, similar assemblages, such as Zachepylivka and Kelegeia, it is unlikely that those rich burials may be of a date later than the third quarter of the 7th century.<sup>63</sup>

Malo Pereshchepyne was the burial of a prominent leader in the region, whose memory was projected as the image of a true king, a man invested with a power represented symbolically by such regalia as a scepter and a bugle.<sup>64</sup> If this was indeed Kuvrat's burial, he must have been remembered as a qagan, whose power was ascribed, not achieved, and coincided with the privileged control of wealth.<sup>65</sup> Exactly what was the source of that wealth, and how was Kuvrat's power ultimately established remains unknown. However, it may not be an accident that either at the same time as, or slightly later than the rich burials, a number of new settlements appear in the steppe lands. They are radically different from all settlements of the previous period. Three of them were excavated at Kantserka (near Zaporizhzhia, Ukraine), in the Lower Dnieper region. On each site there were several kilns associated with a large quantity of Gray Ware, including amphora-like jugs, with no parallels or traditions in earlier ceramic assemblages.<sup>66</sup> Such pottery was found on several sites in the Middle and Lower Dnieper area, both in Right- and in Left-Bank Ukraine.

61 Werner (1984), 16–17 (“ceremonial or wedding belt”); pl. 18/14, 15, 17, 19–23, 25–32. For the coins, see Sokolova (1997), 22–23 and 35–37. All coins struck for Constans II are die-linked, an indication that they reached the steppe lands of Eastern Europe together, all at the same time.

62 Gavritukhin (2006); Komar (2006a).

63 Komar/Khardaev (2012), 257–58; 258 fig. 7/1–6; Semenov (1991), 128; 131 fig. 1/4. The later solidus struck for Emperor Constans II between 646 and 651 and deposited at an unknown date in the grave discovered in Zhuravlikha (near Bila Tserkva, Ukraine) was also pierced; see Komar (2006b), 405 and fig. 2/5.

64 L'vova/Marshak (1997), 493 and 495 fig. 4; L'vova (1998), 110 and 111 fig. 1/7.

65 Curta (2006b), 5–7.

66 Smilenko (1975), 119, 122, and 124. For the Gray Ware produced at Kantserka, see also Smilenko (1990). For the kilns, see Volodarets'-Urbanovych (2011).

Judging by the chronology of those assemblages in which Gray Ware was associated with datable artifacts, the activity of the center of ceramic production in the Lower Dnieper region began at some point during the last quarter of the 7th century.<sup>67</sup> In other words, by the time a chieftain—possibly Kuvrat—was symbolically buried in Malo Pereshchepyne, the economic profile of the steppe region has begun to change radically. Gray Ware jugs, as well as an earring with star-shaped pendant may indicate a similar date for another settlement excavated on an island in the middle of the river Bug, not far from Haivoron (near Uman', Ukraine). However, both pottery and earring appear to be isolated finds. The excavations unearthed 25 smelting furnaces very similar to those in use during the 6th century in Širna (see chapter 8), but none of them produced any material relevant for dating the site.<sup>68</sup> This is, in fact, the first early medieval ironworking center in the steppe belt of Eastern Europe. If, like Kantserka, the beginnings of the Haivoron settlement may be dated to the second half or last third of the 7th century, then that settlement may have been part of the network of new economic centers associated with the rise of the Khazar qaganate.<sup>69</sup>

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For the ceramic production center at Kantserka as a novel phenomenon, see Volodarets'-Urbanovych (2012).

- 67 Volodarets'-Urbanovych (2010); Volodarets'-Urbanovych (2012); and Volodarets'-Urbanovych (2015); Komar (2018).
- 68 Bidzillia (1963), 123, 125, 138–40, and 138 pl. 4/1 (for the earring). See also Prykhodniuk (1975), 109–10; Voznesens'ka/Nedopako/Pan'kov (1996), 27–28; 26 fig. 2/2; Koloda/Kushchenko/Shvecov (2004).
- 69 Noonan (1994).

**PART 2**

*Far Away from the Empire*





## Demographic Collapse in East Central Europe: Poland at the End of Late Antiquity

For no other country in East Central Europe is the debate about continuity between Antiquity and the Middle Ages more significant than for Poland. While, despite the evidence, the demographic collapse in the 7th-century Balkans has not attracted much scholarly attention, the question is of considerable importance for Polish archaeologists and historians. To be sure, the same reason is responsible for the neglect of the problem in the Balkans and for the enormous attention reserved to it in Poland. In both areas, both continuity and discontinuity are perceived in ethnic terms. The heated debate surrounding the ethnogenesis of the Slavs—a major historiographic issue in Poland since the 1990s—cannot be understood without reference to the question of what happened to the population in that part of Europe during the last part of Late Antiquity. Did the “Slavic culture” grow naturally out of local roots, or was it imported from the outside?<sup>1</sup> At stake, however, was the ethnic attribution of archaeological assemblages and artifacts, not economic and social structures. For many decades after World War II, continuity was assumed, without much need for demonstration.<sup>2</sup> With the gradual accumulation of the archaeological evidence, it became evident that at some point between the mid-5th and the beginning of the 6th century, the lands now within Poland experienced rapid depopulation.

According to the Polish archaeologist Kazimierz Godłowski (1934–1995), no archaeological evidence exists after the mid-5th century for any human presence in the lands to the east from the middle course of the Vistula. That includes Lesser Poland, a region that was relatively well populated during the first half of the 5th century.<sup>3</sup> The only finds from the lands to the west from the river Vistula that could be dated after 500 with some degree of certainty are those of Pomerania (the lands between the Odra and the Vistula). They all are either

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- 1 At stake, of course, is whether or not the Slavs were native to the present-day territory of Poland; see Piontek (2006) and Makiewicz (2008). For surveys of the debate, from both sides, see Nowakowski (2002); Parczewski (2005); Urbańczyk (2006); Jędrzejewska (2016).
  - 2 Kostrzewski (1961); Jażdżewski (1968); Łaszczewska (1975); Żak (1984). The first serious doubts about such theories were planted in the 1970s by Kazimierz Godłowski; see Godłowski (1976); Godłowski (2005), 59–75.
  - 3 Godłowski (1989), 58 and fig. 19; Godłowski (2005), 239–40 and 239 fig. 19.



hoard or stray finds, as no 6th-century settlement sites have so far been found in the region.<sup>4</sup> Hoards of golden torcs, finger-rings, and bracteates, however, are typical for 5th- and 6th-century Denmark and southern Sweden, which has encouraged scholars to speculate about the presence of Scandinavians on the southern shore of the Baltic Sea.<sup>5</sup> Both cremation and inhumation graves with stone constructions in four cemeteries excavated in the region of Słupsk (Główczyce, Głuszyno, Górzyno, Witkow; Fig. 21) have been attributed to Scandinavians, specifically to settlers coming from the neighboring island of Bornholm.<sup>6</sup> No evidence exists that either the golden torcs from hoards, or the weapons (swords, lance heads, shield bosses) found in burial assemblages are of local production. In the absence of settlement sites, it is impossible to verify the assumption that the people who buried their dead in those graves have come from across the sea. If they did, it remains unclear what they were looking for on the southern shore of the Baltic Sea. Some scholars believe that Pomerania was linked to the fur trade network supposedly organized by Scandinavians in Late Antiquity.<sup>7</sup> There are, however, no signs of any commercial activity in the region, and no traces of fur animals being hunted (e.g., no beaver bones, no blunt arrow heads). Moreover, conspicuously Scandinavian artifacts, and even burial types have been found along the Baltic coast in the region of the Lower Vistula, as well as in Estonia (see chapter 11). In both areas,

4 Godłowski (1980), 74–75; Leube (1996), 264. The existence of a 6th-century occupation phase on the settlement sites excavated in Dębczyno (near Bialogard, in West Pomerania) is still a matter of debate. See Godłowski (1980), 69–70; Machajewski (1999), 246. Equally doubtful is the 6th-century dating of the last occupation phase on earlier, or the first occupation phase on later sites in the region. See Porzeziński (1972); Porzeziński (1975), 171; Machajewski (1979), 29; Köhler (1980), 178 and 180; Porzeziński (1980), 126; Sikorski (1987), 282–83; Łosiński (1988), 4 and 7; 4 fig. 3. The demographic collapse is documented also on the other side of the river Oder, in northeastern Germany. However, that region produced clear evidence of small pockets of population around the lakes Tollense and Unterucker; see Volkmann (2014), 135 fig. 2; Volkmann (2016), 102, 96 fig. 5, and 103 fig. 12. For the contrast between (Polish) Pomerania and the lands in northeastern Germany (Vorpommern), see also Machajewski (2005), 193–94; Pędziszewska et al. (2020), 163, 166, 168, 182, and 192.

5 Machajewski (1992), 82–83 and 92. Of all four hoards from Pomerania that could be dated to the 6th century (Karlino, Piotrowice, Radosiew, and Stargard), only one (Karlino) contains gold coins as well. The coins, however, are earlier than some of the finger-rings with which they were associated. For the dating of the torcs and finger-rings, see Godłowski (1980), 74. It is important to note that the only 6th-century coins that have been found in hoard and stray finds in Pomerania are solidi struck for Anastasius (498–512) and their Ostrogothic imitations; see Ciołek (1998); Ciołek (1999), 176. For the presence of solidi and torcs in Pomerania as the result of non-commercial transactions, see Gaul (1984), 100; Iluk (1998), 53–56; Ciołek (2005), 1103.

6 Machajewski (1992), 78–79, 82, and 91–92; 80 fig. 6; 81 fig. 7; Duczko (1997), 196 and 198.

7 Kazanski (2010c), 31.



FIGURE 21 Principal sites mentioned in the text and in the notes

however, they have been interpreted as an indication of cultural contacts across the Baltic Sea, not of the presence of Scandinavians in search for furs.<sup>8</sup> A hoard of golden rings and bracteates from Wapno is believed to have been deposited ritually on a sacrificial site by people coming across the Baltic Sea from Öland and Scania in search for salt.<sup>9</sup> However, no evidence exists that the large deposits of rock salt in the area were mined at any point before the 19th century. The southernmost assemblage of its kind, Wapno is located south of the river Noteć within the modern voivodeship of Greater Poland. No other 6th-century assemblages are known from Greater Poland, but a few settlements have been recently excavated about 100 miles to the southwest, on the right bank of the Middle Oder River, next to the border between the present-day voivodships

<sup>8</sup> Kazanski (2010c), 33.

<sup>9</sup> Żak (1953); Dzieduszycki (1991–1992), 49; Kara (1994), 105. According to Oras (2015), 92, the Polish hoards are remarkably similar to the Scandinavian wealth deposits.

of Greater Poland and Lubusz.<sup>10</sup> The remains of handmade pottery in one of the refuse pits discovered in Kalsk (near Sulechów) have been dated by means of thermoluminescence to  $570 \pm 86$ .<sup>11</sup> The dates obtained by the same method from the pottery shards, as well as the radiocarbon dates from a sunken-floored building in Stożne (near Zielona Góra) suggest an occupation that lasted well into the mid-7th century.<sup>12</sup> Two fragments of raw amber found in the building suggest the local production of beads, even though no such artifacts are known from contemporaneous assemblages in the region.<sup>13</sup> Cattle and pig teeth found together with the raw amber point to animal breeding, but nothing else is known about the economic profile of those small communities in the Middle Oder region.<sup>14</sup> The exploitation of the fertile soils around Sulechów cannot be dated before ca. 700, as indicated by the pollen analysis of sediments in the valleys of the Oder and the Lubsza.<sup>15</sup> Farther to the south and southeast, with no finds in Silesia, except a few settlements that may be dated to the late 5th or early 6th century on the basis of pottery, one can surmise a severe depopulation

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- 10 There is no way to verify the 6th-century date advanced for the earliest occupation phase on such settlement sites excavated in Greater Poland as Bruszczewo. See Brzostowicz (2002), 133–37. All settlements in Pomerania and Greater Poland that Lozny (2013), 70 has dated to the 6th century produced only pottery. For some, Lozny's tables 3.6 [Lozny (2013), 57–61] and 3.7 [Lozny (2013), 62–68] mention radiocarbon dates, with no details. Radiocarbon dating of the animal bones from Cieśle and Giecz suggests that both sites were occupied until the late 6th century. However, the bones were collected from the filling of the settlement features and cannot therefore be used as evidence of occupation. Moreover, there are serious contamination problems associated with that archaeological context; see Żychliński/Goslar (2008). At any rate, the paleobotanical analysis of biostrata from the nearby Lake Lednica contradicts the idea of a continuous occupation of sites in the 6th century; see Tobolski (1991).
- 11 Gruszka (2011), 127–28, 130–31, and 135; 130 pl. I; 131 pl. II; 132 pl. III; 133 pl. IV; Gruszka/Pawlak/Pawlak (2013), 176–78; 180 fig. 2. For other settlements in the Middle Oder region that are believed to have been occupied during the 5th and 6th centuries, see Dąbrowski (1990), 169–71; Dąbrowski (1998). Most finds in central Poland that have been plotted on the map by Maczyński (1998), 88 fig. 3 cannot be dated later than ca. 500.
- 12 Gruszka (2007), 302, 307, and 309; 308 fig. 6; 317 pl. V; 318 pl. VI; 319 pl. VII; 320 pl. VIII; 321 pl. IX; 322 pl. X; 325 figs. 5–6; 326 fig. 8; Gruszka (2010), 228–231, 248, 255 and 258; 233 fig. 5; 236 photo 4; 237 pl. I; 239 pl. II; 245 pl. III; 243 pl. IV; Gruszka/Pawlak/Pawlak (2013), 177 and 178–179; 185 fig. 7.
- 13 Gruszka (2007), 322 x/5, 6 and 326 fig. 8. For amber in early medieval Poland, see Malinowski (1988).
- 14 Gruszka (2010), 22 with table 1.
- 15 Ciesielski/Gruszka/Łuczak (2016), 121. The earliest occupation phase on the settlement site excavated in Czeladź Wielka (near Góra, in Lower Silesia) has been dated to the 6th or 7th century without any solid arguments; see Lodowski (1972), 194–95.

of the region not unlike that of Pomerania.<sup>16</sup> Even more drastic was that of Lesser Poland, where no finds are so far known that could be dated with any degree of certainty between ca. 450 and ca. 600.<sup>17</sup>

Despite Godłowski's claims to the contrary, however, the lands to the east from the Middle Vistula River are not devoid of finds. One particular site is of significance in that respect. At Haćki, near Bielski Podlaski (Podlasie, in eastern Poland, not far from the border with Belarus), there are clear signs of a 6th- and early 7th-century occupation on a natural postglacial hill rising up in the middle of a wide and damp valley. Trial, and then systematic excavations revealed traces of an early medieval occupation, but no structures have been identified.<sup>18</sup> Some have interpreted that to be the sign of a temporary occupation, with Haćki functioning as a place of refuge.<sup>19</sup> However, it is hard to understand where the population taking refuge at Haćki came from, as the systematic field-walking in the area strongly suggests that the site was an isolated settlement in a region that seems to have been otherwise depopulated.<sup>20</sup> A number of finds—a ladle, five stone moulds, five engraving tools, and a small hammer—point to casting taking place on the site, even though no buildings and no facilities have been found that could be associated with any crafts.<sup>21</sup> Moreover, the metallographic analysis of several bronze artifacts found on the

16 Błażejewski (2013), 178. For the pottery believed to be of a 6th-century date, see Boege (1937); Domański (2005), 255 fig. 2.

17 Godłowski (2005), 240.

18 Kobyliński/Szymański (2005), 43, 45, and 56–64; 44 fig. III-1; 45 fig. III-2; 46 fig. III-4; 64 fig. III-37; Kobyliński/Szymański (2015), 111–13; 112 fig. 1; 113 fig. 4. Both Kobyliński (1990), 151, and Dulnicz (2000), 87 with fig. 2 claim that the two lines of double postholes close to the rampart indicate early medieval buildings. In fact, those structures are of an Iron-Age date [Kobyliński/Szymański (2015), 114 and 118–19]. That there was a much earlier occupation of the site results from the radiocarbon analysis of samples of charred seeds and charcoal, for which see Pazdur et al. (1993). The charred seeds in question were initially and hastily dated to the 6th century at the earliest; see Czczuga/Kossacka/Klyszejko (1976).

19 Kobyliński (1990), 152; Dulnicz (2011), 198. Kobyliński and Dulnicz also refer to cremated human remains, which supposedly indicate that Haćki was a ceremonial site. However, there is no evidence that the cremated remains are associated with the 6th- to 7th-century occupation of the site.

20 Barford/Kobyliński/ Krasnodębski (1991), 140: after the mid-5th century, Podlasie was “a deserted wilderness.” Kobyliński/Szymański (2015), 133 mention an open settlement near the stronghold, with above-ground dwellings with stone ovens. However, that settlement site is dated to the 7th and 8th centuries, and thus post-dates the early medieval occupation inside the prehistoric stronghold.

21 Kobyliński/Szymański (2005), pl. III-1, 2, 8, 9, 11–13. Kobyliński/Szymański (2015), 125 mention waste products in the form of pellets, lumps, teardrops resulting from bronze casting. Kobyliński (1990), 152; and Dulnicz (2004), 306 claim that weavers were active at

site (belt fittings and a buckle) strongly suggests that they were not produced locally, but most likely brought from distant locations in the Upper and Lower Danube region.<sup>22</sup> Moreover, the best analogies for two of the stone moulds found in Hački have been found in Bernashivka (see chapter 8), which suggests that, like the bronze artifacts, the casting technology may have been brought from the south.<sup>23</sup> To the same direction point the fragments of clay pans, a ceramic category associated with the consumption of cereal-based foods, even though no quern stones and no seeds of cereals are known from Hački.<sup>24</sup>

Both querns and cereal seeds, however, have been found on sites in southern Poland. Those sites have commonly been attributed to the early Slavs and dated between the 5th and the 7th century.<sup>25</sup> Ever since Kazimierz Godłowski, Polish archaeologists and historians believe that the early Slavs have migrated first to southeastern Poland (Lesser Poland), then to Silesia and other territories.<sup>26</sup> It has now become common historiographic practice to set the economic and social profile of the early Slavic settlements in southern Poland in sharp contrast to that of earlier settlements of the “Roman age.”<sup>27</sup> Michał Parczewski has dated the earliest occupation phase on those settlement sites between the mid-5th and the mid-7th century.<sup>28</sup> Although generally accepted, Parczewski’s dating is based on a simple seriation of ceramic assemblages and on the unwarranted assumption that assemblages that include only handmade

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Hački in the 6th and early 7th century. However, there are no loom weights and no other indications of weaving sheds.

22 Kobyliński/Hensel (1993), 132 and 133.

23 Kobyliński/Szymański (2005), pl. 111-9, 11; Vynokur (1997), 73 fig. 27, 77 fig. 30, 89 fig. 38. The first to notice the resemblance was Dulnicz (2011), 198. A stone mould has also been found at Szelligi (near Płock, in Mazovia), a site long believed to have been occupied during the 6th and 7th centuries, because of such diagnostic facts as a bow fibula. See Szymański (1967), 20 fig. 5/10 and 24 fig. 6/12; Szymański (1987). Radiocarbon dates have also been interpreted as pointing to that same date; see Dulnicz/Moszczyński (1998). However, the pottery thrown on a tournette that was found in abundance in the stronghold and the two satellite settlements cannot be dated before the late 7th and 8th centuries [Dulnicz (2011), 198].

24 Kobyliński/Szymański (2005), 69 fig. 111-42. According to Barford/Kobyliński/Krasnodębski (1991), 140, the handmade pottery found on the site has no relation to the so-called Prague type attributed to the Slavs.

25 Querns: Lodowski (1981), 150 and 158 fig. 9; Parczewski (1996), 263, 272, 266 fig. 11/1, 274 fig. 12/1, and 280 fig. 18; Baczyńska/Maj (1981), 175. See also Cygan (2006), 56–57. The only cereal seeds so far known are those collected from the filling of a refuse pit in Korzkiew (near Cracow, in Lesser Poland), for which see Nowak et al. (2016), 249.

26 Godłowski (1979); Parczewski (1991); Parczewski (1993); Leciejewicz (1999); Parczewski (2000). See also Gavritukhin (2009).

27 Mączyńska (2002); Dobrzańska/Kalicki/Szmoniewski (2009).

28 Parczewski (1993), 93.

pottery are the earliest. At a closer examination, however, not a single, so-called “early Slavic” settlement site in Lesser Poland or Silesia can be dated before ca. 600.<sup>29</sup> There is therefore no evidence of agriculture in southern Poland in the 6th century, as the earliest finds of tools cannot be dated before the mid-7th century.<sup>30</sup> The earliest finds of clay pans and domestic animal assemblages may be only slightly earlier than that.<sup>31</sup> The same is true for the earliest finds of combs, as well as of half-manufactured objects of antler or bone.<sup>32</sup>

The archaeological evidence of crafting is equally late. Slag has occasionally been found in sunken-floored buildings, but without any other indications of smelting or blacksmithing.<sup>33</sup> With the exception of one engraving instrument, no tools may be dated to the early 7th century.<sup>34</sup> Three loom weights from a sunken-floored building in Nowa Huta are the only evidence of weaving.<sup>35</sup> A clay mould with traces of copper and zinc was found together tongs,

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- 29 No less than three chronological indicators exist so far, all from Lesser Poland. First, a handmade pot was found in a pit excavated in Nowa Huta, on the eastern outskirts of Cracow. Inside the pot was a small hoard of bronze artifacts, including a belt mount in the form of a rosette and four trapezoidal pendants—all artifacts most typical for the Early Avar age, and therefore dated to the first decades of the 7th century. See Dąbrowska (1984). Second, a bronze coin struck in Nicomedia for Emperor Heraclius in 613/4 was found next to a house excavated in Grodzisko Dolne, in the valley of the river San, not far from the Polish-Ukrainian border. See Czopek/Morawiecki/Podgórska-Czopek (2001). Finally, the dendrochronological analysis of timber remains from the house excavated in Wyciąże, near Nowa Huta, indicates a date between 625 and 635 for the felling of the trees that were used to build that house. See Poleska/Bober/Krąpiec (1998).
- 30 Two sickles have been found in Nowa Huta and Żukowice (near Głogów, in Silesia); see Hachulska-Ledwos (1971), 130 and 136 pl. LXXVIII/2; Parczewski (1989), pl. xCVI/2. The sickles were associated with remains of both handmade pottery and pottery turned on a tournette, a clear indication of a later phase of the “early Slavic culture,” which is dated by Parczewski (1995), 14 after the mid-7th century. The plowshare found above a refuse pit in Nowa Huta cannot be dated with any degree of precision, but the ceramic material in that pit is also of a later date; see Hachulska-Ledwos (1971), 16 and figs. 5 and 7.
- 31 Parczewski (1989), 11/8, v/11, xxv/8, xxxiii/17, xxxiv/17 and 21, lx/25 and 27–29, lxx/8 and 13–15. For animal bones, see Lipińska (1961), 219; Nowak et al. (2016), 261. As the statistics in Lodowski (1980), 139 table III and 140 table IV show, the faunal assemblages from three 7th-century settlement sites in Lower Silesia (Czeladź Wielka, Żukowice 1 and Żukowice 9) are dominated by cattle bones.
- 32 Hachulska-Ledwos (1971), 54 and 59 pl. xxx/5; Kaczkowski (1971), 22 and 25 fig. 7/5; Parczewski (1989), pls. xv/10 and xl/9; Parczewski (1993), 204 pl. xxx/14; Poleska/Bober (1996), 124 with fig. 22/1; Dobrzańska (1998), 84 and 111 pl. 4/5. See also Cnotliwy (1998).
- 33 Parczewski (1988), 171; Podgórska-Czopek (2009), 117–18, 148, and 166. For blacksmithing in Poland in the early Middle Ages, see Piaskowski (1986).
- 34 Engraving tool of a possibly earlier date: Parczewski (1989), pl. v/7.
- 35 Hachulska-Ledwos (1986), 120 and 130 pl. 11/2. The loom weight found in Żukowice [Kaczkowski (1971), 33 fig. 15/9] is without any archaeological context.

hammering scale, and a copper coin in a sunken-floored building of the settlement excavated in Żukowice 1.<sup>36</sup> However, the ceramic assemblage with which all that was associated included pottery thrown on a tournette, which points to a date in the late 7th or even 8th century.<sup>37</sup> The same date may be advanced for the ladle found in a refuse pit in Nowa Huta.<sup>38</sup> The bronze artifacts and the fragment of a bronze sheet found inside a handmade pot deposited in a refuse pit of that same settlement site may well have been a collection of scrap metal. If so, the hoard may be interpreted as indirect evidence of metalworking, despite the absence of any jeweler tools or instruments.<sup>39</sup> The same interpretation may apply the fragment of a bronze sheet found in Wyciąże inside a sunken-floored building dendro-dated between 625 and 635.<sup>40</sup> But there is no direct evidence of any metalworking activity in the 6th century. Nor is there any evidence of other crafts, not even of kilns.<sup>41</sup> No household industrial activities are documented archaeologically in southern Poland during the 6th and early 7th century, except, indirectly through the fragment of raw amber from a sunken-floored building excavated on the settlement site at Bachórz (near Rzeszów).<sup>42</sup> Exactly how a piece of Baltic amber could reach a settlement in the Subcarpathian region of present-day Poland remains unclear, but trade is not the explanation. The same is true for the few early Byzantine coins found in southern Poland. The two silver coins (*miliaresia*) struck for Emperor Justinian in Constantinople between 527 and 537 and found in Rabka (near Cracow, Lesser Poland) did not circulate much, and were most likely ceremonial issues.<sup>43</sup> The presence of 4th-century coins in three small hoards from

36 Parczewski (1988), 202–03; Parczewski (1989), pls. IV/9 and V/6. A stone mould is known from Żukowice 9, but without any archaeological context; see Kaczkowski (1971), 22 and 24 fig. 6/12. The early date (5th to 6th century) advanced for the clay mould from Żukowice by Kóćka-Krenz (1988), 86 is simply wrong.

37 The same is true for the clay mould found in Polwica (near Wrocław, in Silesia). The timber remains from that site have been dendro-dated to 677; see Szwed (2013), 112 and 127 fig. 16e.

38 Hachulska-Ledwos (1971), 174 and 175 pl. C/5. A few crucibles may be of an earlier date: Parczewski (1988), 204; Parczewski (1989), pl. VII/19; Podgórska-Czopek (2009), 123 and 122 pl. L/13.

39 Dąbrowska (1984), 356–57 and 356 fig. 3e.

40 Poleska/Bober/ Krąpiec (1998), 54 and fig. 22/20.

41 Occasional finds of wheel-made pottery have been interpreted as “imports” from the Merovingian area or from the Middle Dnieper region, which raises the question of commercial contacts with those areas, for which, however, there is absolutely no evidence; see Parczewski (1993), 66.

42 Parczewski (2003), 198.

43 Kałkowski (1967); Salamon (2002). According to Salamon (2004), the coins arrived in southern Poland with Herules that had been previously recruited in the Roman army.

eastern Silesia strongly suggests accumulation in the Empire, whence the collections were then brought *in toto* to southern Poland.<sup>44</sup>

The conclusion one can easily draw from this survey of the archaeological and numismatic evidence from 6th- and early 7th-century Poland is that the lands north of the Carpathian Mountains stood in sharp contrast to those along the Lower and Middle Danube. Besides severe depopulation, if not demographic collapse, the archaeological record reflects no economic activity comparable to those taking place at the same time in the Carpathian Basin, as well as in southern and eastern Romania: no “itinerant agriculture,” no cattle breeding, and no centers of specialized production—smelting or weaving. Irrespective of the ethnic identity attributed to the inhabitants of the first settlements of early medieval Silesia and Lesser Poland, those communities had nothing in common with those located farther to the south, in Bukovina, Moldavia, Moldova, and Walachia. The subsistence economy of the early medieval communities in southern Poland is just as poorly known as that of the inhabitants of Lower Silesia and the lands farther to the northeast, in Pomerania. Some contacts with the south most certainly took place, as they were responsible for the latest gold coins reaching the southern Baltic Sea shore and for the 6th- and early 7th-century coins of bronze, silver, and gold that were found in southern Poland. Contacts with the south may also provide an explanation for the relative abundance of amber in 6th-century burial assemblages in the Carpathian Basin. Occasional finds of raw amber in Stożne and Bachórz strongly suggest that Baltic amber reached the Middle Danube region not directly, but through the intermediary of small communities living in the sparsely inhabited territory of present-day Poland. It would be a mistake to refer to such exchanges as trade, just as it would be wrong to explain the presence of bracteates in hoards of gold in northern Poland or of early Byzantine bronze coins in southern Poland as a result of commercial transactions. But before ca. 700, neither influences from the south, nor those from the north (across the Baltic Sea) had any significant role in the transformation of the economic and social structures in the Polish lands. As experienced in the Vistula region, the 6th century was a true chasm.

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However, Salamon/Wołoszyn (2006), 238–39 believe that most 6th- to 7th-century coins found in southeastern Poland came from the Carpathian Basin, and not directly from Byzantium. See also Wołoszyn (2008), 205. At any rate, much like in the Lower Danube region, bronze coins struck for 6th-century emperors are typically stray finds. There is, therefore, no way to tell how long after leaving the mint they ended up in southern Poland. See Salamon/Muzyczuk (2003); Wołoszyn (2005).

44 Wołoszyn (2009), 498–99; Wołoszyn (2005), 662–63.



## Stability and Expansion in the Baltic Region

The only 6th- to 7th-century settlements known so far from the Baltic region of East Central Europe are located to the east of the river Vistula, in the lands believed to have been inhabited by people speaking Baltic languages. Excavations carried in the 1970s at Wyszembork (near Mragowo, in northeastern Poland; Fig. 22) have brought to light nine refuse pits. In one of them, there was a fragment of a sickle, in another a fragment of a quern stone, both indicators of agricultural production, if not also of cereal cultivation.<sup>1</sup> Quern stones have also been found in Jaunlive (across the Daugava River from Salaspils, Latvia), but it remains unclear to which occupation phase they belong—the earlier (2nd century) or the later (5th- to 6th-century).<sup>2</sup> Other settlements are known from Czechowo and Janów Pomorski, near Elbląg (Poland), in the former delta of the river Vistula.<sup>3</sup> At Tumiany, nine above-ground buildings and 11 silos have been attributed to the earliest occupation phase and dated between the second half of the 5th and the late 8th century. At any moment during this occupation phase, no more than three nuclear families lived on the shore of Lake Pisz, with a total of 15 to 20 people.<sup>4</sup> More settlements are known from southern Lithuania, as well as northern Estonia.<sup>5</sup> Unfortunately, neither settlement features, nor tools and paleobotanical samples are known from any of those settlements, and the chronology of some of them remains uncertain.<sup>6</sup>

In the Baltic region, most sickles and scythes are known from burial, not settlement assemblages. Sickles typically appear in female graves.<sup>7</sup> The same is

1 Nowakowski (1993), 91–92; 91 fig. 12e; 92 fig. 13. The dating of the settlement features is based primarily on the associated pottery. For charred seeds of cereals (primarily barley, millet, and rye) found in Wyszembork, see Lityńska (1993). For cereals cultivated in the 5th and 6th centuries farther inland to the east, at Osinki (near Suwałki, next to the Polish-Lithuanian border), see Czeżuga/Kossacka (1966). Of a later date are the paleobotanical samples from Pasyń (near Szczytno, in northeastern Poland), which also include rye, barley, and millet; see Czeżuga/Kossacka (1974).

2 Atgāzis (1976), 446.

3 For Czechowo, see Jagodziński (1997), 81–82. For the 6th- to 7th-century settlement predating the Viking-age emporium at Janów Pomorski, see Bogucki et al. (2012); Bogucki (2013).

4 Dąbrowski (1980), 236; Baranowski/Żukowski (2017), 329–30, 333, and 339 fig. 2.

5 Daugudis (1966); Lūgas (1997).

6 Tautavičius (1996), 23.

7 Estonia: Tamla (1988), 426; Allmaë/Aun/Maldre (2009), 94 fig. 15/1. Latvia: Atgāzis (1980), 384; Ciglis (2001), 50 and 63; 51 fig. 2/11; 60 fig. 9/9; Graudonis (2003), 39, 45, and 46; 39 fig. 32/3;



FIGURE 22 Principal sites mentioned in the text and in the notes

true for mattocks and hoes.<sup>8</sup> By contrast, scythes are associated with weapons in male burials.<sup>9</sup> If one takes the gender symbolism of those agricultural implements at face value, one can draw the conclusion that women, some of whom were buried with sickles and mattocks, were primarily involved in the cultivation of crops (with breaking the soil, weeding and harvesting highlighted symbolically as the most important activities), while men, particularly those whose military status was marked in death by the deposition of weapons, were in charge of the livestock (if one assumes that scythes were used primarily for cutting grass to make hay).<sup>10</sup> In reality, the symbolism of those tools went beyond mere reference to agricultural activities. As valuables, they appear in hoards along with torcs, bracelets, and weapons.<sup>11</sup> It may not be an accident that such hoards have been found in or near hillforts, which are believed to have operated as regional centers.<sup>12</sup> In other words, agricultural implements may have been symbols of social status, much like burials with horses, no doubt a reference to the ability that only a few members of society had to raise and control livestock.<sup>13</sup>

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- Griciuviėnė/Grižas/Buža (2005), 27–28; Griciuviėnė (2007), 35–36. Lithuania: Michelbertas (1971), 321; Stankus (1979), 462; Merkevičius (1984), 49 fig. 9/6; Stankus (1984), 69–70 and 73 fig. 12/2–4; Vaškevičiūtė (1985), 50; Kazakevičius (1993), 148, 150, 152, and 154; 65 fig. 111/4, 8, 13; 121 pl. 191/1.
- 8 Graudonis (1977), 42 and 44; 41 fig. 9/1; Griciuviėnė/Grižas/Buža (2005), 29–30 and 38–40.
- 9 Latvia: Atgāzis (1977), 16; Griciuviėnė/Grižas/Buža (2005), 31–34. See also Dumpe (1958); Graudonis (1985), 32. Lithuania: Butėnienė (1968), 154, 156–159; Vaitkunskienė (1995), 53 and fig. 69/1; 98 and fig. 136/5; Bliujienė/Butkus (2002), 83 and 84 fig. 2/3; Bliujienė/Butkus (2009), 154; pl. 111/16; Bliujienė (2013), 233 and 277. Russian enclave (Kaliningrad region): Hilberg (2009), 489.
- 10 Vaitkunskienė (1985). For gender in the archaeology of the early Middle Ages in eastern Lithuania, see Kurila (2009).
- 11 Urtāns (1977), 145, 150, 148, and 153; 146 fig. 51; 147 fig. 52; Oras (2013), 65 and 68 fig. 4; Oras (2015), 292, 319, 335 and 348. Although they are never found in hoards, adzes and chisels occasionally appear in male burials, sometimes in association with scythes. See Tautavičius (1984), 100 fig. 7/3; Graudonis (2001), 58 and 60 fig. 13/1; Griciuviėnė/Grižas/Buža (2005), 31–34.
- 12 Simniškytė (2005), 33; Simniškytė (2013), 104–05. Each hillfort was the center of an agrarian province, for which it presumably served as lynchpin of a settlement hierarchy. For a much more critical approach to the problem, see Vengalis (2016). In Latvia and Estonia, no hillfort could be dated with certainty between ca. 500 and ca. 650. See Mugurėvičs (1967); Stubavs (1976), 35–36; Lillak/Valk (2008). In Prussia (northeastern Poland and the Kaliningrad region of Russia), no hillfort can be dated earlier than 700; see Wadył (2017), 66.
- 13 Bertašius (2000), 144–45; Bliujienė/Butkus (2009). For burials with horses in Sambia (the Kaliningrad region of Russia), see Skvorcov (2013); Skvorcov et al. (2017), 351. For horse burials in Prussia, see Dąbrowski (1973); Kontny/Okulicz-Kozaryn/Pietrzak (2009); Bogucki (2013).

The rise of new social elites was linked to the development of agriculture even in the absence of forts. Both lavish burials (many of which produced weapons) and the deposition of hoards of silver ornaments, two archaeological phenomena dated to the early 6th century, have been interpreted as social strategies employed by local elites in northern Estonia.<sup>14</sup> That, however, is also the region in which fossil fields have recently been identified. Clearance cairns and small sections of baulks have been found at Ilmandu (near Tallinn), and the radiocarbon analysis of the charcoal from the initial slash-and-burn produced dates between the 5th and the 7th centuries.<sup>15</sup> Pollen, charcoal, and loss-on-ignition analyses from a peat section near the Keava Bog, in central Estonia have revealed a major expansion of arable farming during that same period.<sup>16</sup> The pollen analysis of a sediment sequence from another bog in southern Estonia indicates that despite the significant increase of the coniferous evergreen cover, there is clear evidence of the cultivation of barley.<sup>17</sup> Farming began to have a serious impact on the environment of southeastern Estonia in the mid-5th century, and the predominant crop on the newly opened fields was rye.<sup>18</sup>

Unfortunately, the rarity of excavated and published settlement sites makes it very difficult, if not impossible to assess the importance of stockbreeding. Cattle dominated by far the animal bone assemblages from features excavated in Tumiany that could be dated between the 5th and the 8th century.<sup>19</sup> Similarly, in faunal assemblages associated with two collective (family?) burials at Ehmja and Lihula (western Estonia), most bones were of cattle.<sup>20</sup> In Lithuania, the raising of sheep indirectly results from fragments of woolen fabric found in graves.<sup>21</sup> It is worth mentioning, however, that loom weights are rare in the

14 Ligi (1995), 227–29. For a different interpretation, see Oras (2015), 208. For elite burials with weapons in northern Estonia, see also Quast (2004), 268. For the warrior elite in Lithuania, see Vaitkunskienė (1995), 101–02.

15 Lang et al. (2003), 76 and 81; 75 fig. 3; 78 fig. 6.

16 Heinsalu/Veski (2010), 97.

17 Niinemets/Saarse/Poska (2002), 254–55. According to Brown (2019), 320–21, the initial phase of woodland clearance in northern Poland (region of Chełmno) cannot be dated before 600.

18 Kihno/Valk (1999), 234–35; Simniškytė/Stančikaitė/Kisieliene (2003), 281. As Tvauri (2012), 104 points out, rye came to be cultivated in Estonia only in the 6th century.

19 Gręzak (2017), 220–21 and 226 Table 2.

20 Mandel (2003), 28–30, 32–37, and 276. By contrast, the animal bones found in the long barrows of southeastern Estonia are of horse and sheep. See Allmaë/Maldre (2005), 128. Pig bones have been found in both settlement and burial contexts in Prussia (northeastern Poland). See Nowakowski (1993), 95; Baranowski (1996), 88.

21 Heydeck (1895), 44–45, 50, and 65; pl. IV/11; Gričiuvienė (2007), 35–36. Textile fragments are mentioned in other contexts as well, but it is not clear whether the fabric in question

Baltic region during the 6th or 7th century.<sup>22</sup> Little is known, therefore, about how the cloth was made, and where. Furthermore, unlike Prussia (northeastern Poland), bone or antler artifacts are very rare in burial assemblages from Estonia and Latvia.<sup>23</sup> If animals were raised, it must have been for dairy, wool, and meat, and not for bone or antler.

Metal artifacts are the commonest in burial assemblages from the Baltic region. Knives, sickles, scythes, as well as weapons (swords, lance and spear heads, and shield bosses) were all made of iron. No smelting sites and no smithies can be securely dated to the 6th and 7th centuries.<sup>24</sup> But the metallographic analysis of the many artifacts found in (primarily burial) assemblages dated to those centuries leaves no room for doubt. Blacksmiths in Lithuania employed quite a variety of technological solutions, each adapted to specific needs. Most knives were made of multiple layers of iron and steel or of iron with carburized edges, while iron-steel-iron “sandwich” was reserved for narrow-bladed axes.<sup>25</sup> Technological choices were restricted to particular sites, which suggests

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- is wool or flax. Kühn (1981), 67; Tautavičius (1984), 115 fig. 22/4; Kazakevičius (2004), 22 and 23; Bliujienė (2013), 403 fig. 276; 406 fig. 278/5. See Pečeliūnaitė-Bazienė (2004), 69. The imprint of a cloth is visible on one of the two urns found in a cremation burial underneath a barrow excavated in Kõnnu (in eastern Estonia, next to the shore of Lake Peipus); see Schmiedehelm/Laul (1970), 160–61; 157 fig. 3/4. Another imprint of a cloth of tabby weave appears on a piece of daub found in Tumiany, for which see Słomska (2017), 275 and 277.
- 22 The only specimens known so far are those found in Tumiany; see Słomska (2017), 278–79.
- 23 The earliest such artifacts known from Latvia are the fragments of a bone bead and a comb from the cremation under a barrow excavated in Grobiņa (near Liepāja, western Latvia). The assemblage has been dated to the 7th century. The barrow was marked by a funerary stele with two carved birds, a motif believed to be of Scandinavian origin. There is, therefore, a good possibility that neither the bead nor the comb was of local production. See Petrenko (1991), 3–7; 10 fig. 2/1, 3–9. Another comb is known from a burial assemblage in Kakuženi (near Jelgava, in southern Latvia), but the date of that assemblage is uncertain [Graudonis (2003), 34–35]. Bone and antler artifacts are also rare in Sambia and Lithuania. See Kulakov (1990), 82 and 122 pl. XXIX/8, 13; Stankus (2000), 161 and 151 fig. 2/4; Kurila/Kliaugaitė (2017), 15 with fig 19/11. For bone combs in Prussia, see Baranowski (1996), 86, 90, 98, 101, and 104; 87 fig. 9g; 91 fig. 14k; 98 fig. 22f; 100 fig. 24c; 103 fig. 28g; Rudnicki (2004), 266 and 273 pl. 1/8.
- 24 It is unclear whether the smelting furnaces from Lavoriškės (near Vilnius, Lithuania) and Imbarė (near Kretinga, Lithuania) mentioned by Daugudis (1989), 63 may be dated to the 6th or 7th century. The same is true for the smelting furnace from Daugmale (near Ogre, Latvia) mentioned in Atgāzis (1976), 446. For the absence of any iron production sites “of a Migration Period or of a firm Pre-Viking Age date” in Estonia, see Tvauri (2012), 113.
- 25 Stankus (1970), 62–63 and 68. Both sickles and scythes were also made of iron with carburized edges. For (additional) carburizing and the iron-steel-iron “sandwich” techniques, see Pleiner (2006), 200–02 and 204–06. For a long seax from Malbork (northern Poland) forged of one carburized and thermally treated piece of soft steel, see Biborski et al. (2013), 33 and 47 fig. 15e. Żabiński/Stepiński (2014), 169 and 293 explain that because the

a highly localized production.<sup>26</sup> Irrespective of the choice, however, all those technologies required special facilities in the form of smithies, of which, however, there is so far no evidence.

Traces of non-ferrous metallurgy have been uncovered in a settlement excavated in Tumiany (near Olsztyn, northeastern Poland).<sup>27</sup> A ladle and a few moulds have also been found in two long barrows of southeastern Estonia.<sup>28</sup> The metallographic analysis of several copper-alloy artifacts from burial assemblages in Latvia and Estonia has demonstrated the prevalence of lead-tin alloys.<sup>29</sup> Along with leaded gunmetal (alloy of copper with tin, zinc, and lead), leaded bronze was also employed in 6th- and 7th-century Prussia for the production of belt fittings and mounts for the horse tack.<sup>30</sup> Most appropriate for casting, alloys rich in lead made it possible to produce thin and delicately ornamented artifacts, which did not need much elaboration after that. The analysis of a few copper-alloy artifacts from the cemetery excavated in Kosewo (near Mrągowo, Poland) indicates casting in a clay form created by pressing a model into a lump of clay.<sup>31</sup> However, there is also evidence of the pressing technique, especially on such artifacts as metal bindings of drinking horns from Prussia and Lithuania.<sup>32</sup> The spectral analysis of specimens from

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seax was made of one piece of soft bloomery steel, it was probably produced in southern Germany, not in Prussia.

- 26 The largest number of iron artifacts from the 5th- to 6th-century cemetery excavated in Plinkaigalis (near Krakės, central Lithuania) are of iron with carburized edges (40 percent). The two-layer technique accounts for 19.64 percent of all iron artifacts from Plinkaigalis, but the percentage is much higher for the contemporaneous cemeteries excavated on the neighboring sites at Pašušvys and Kairėnėliai (41.66 and 33.66 percent, respectively). Conversely, 14.3 percent of the artifacts found in Plinkaigalis (five knives, a sickle, and two axes) are made of steel, while very few such artifacts have been found in Kairėnėliai (4.16 percent) and they are completely absent in Pašušvys. See Stankus, (1986), 58–59.
- 27 Dąbrowski (1975), 276 and 279 writes of a crucible, moulds, and wasters; see also Dąbrowski (1980), 236–37 and 240. There are neither moulds nor wasters, but only a crucible in Baranowski (2017), 463.
- 28 Schmiedehelm/Laul (1970), 160 and fig. 4; Sedov (1974), 48; pl. 23/1, 4 and pl. 27/9. See also Moora (1963), 357.
- 29 Daiga (1962); Chernykh/Khoferte/Barceva (1969), 109–13.
- 30 Hensel (1996), 131–32; Mišta/Gójska (2015).
- 31 Bliujienė (2013), 371–72; Żołędziowski (2015), 50. However, there are clear signs of surface treatment, mostly by punching, on bronze bracelets from that same site; see Żołędziowski (2015), 52 and 54–55.
- 32 Peiser (1921), 115 and fig. 1; Deemant (1978), 81–83; pl. VIII/1; Tautavičius (1981), 29–30; 30 figs. 31–32; Kazakevičius (1993), 140 and 73 fig. 125/8; Kulakov (1997), 598 and 599 fig. 3/9, 10; Bliujienė (2004), 69 with fig. 2; Skvorcov (2010), 95–96; pls. DLXVI/1–5 and DXLVII; Kontny/Pietrzak (2013), 124 fig. 2/9; Rudnicki/Skvorcov/Szymański (2015), 558–89; 598

Plinkaigalis and Pašušvys shows a homogeneous composition of the alloy, while the trasological analysis points to similar pressing techniques.<sup>33</sup> This has rightly been interpreted as indicating the work of one and the same craftsman. Without settlement archaeology, however, it is impossible to locate that craftsman with any precision both geographically and socially. It is perhaps worth noting that, unlike the Carpathian Basin (see chapter 6), no evidence exists in the Baltic region of the social status of craftsmen (black- or goldsmiths) being marked specially in death. Besides sickles and scythes, mandrils and engraving tools are occasionally found in burial assemblages in Prussia, Lithuania, and Estonia.<sup>34</sup> However, those tools were found singly, sometimes in association with sickles or scythes, not with jeweler tools. No tool kits like those from Brno or Band (see chapters 6 and 7) have so far been found in the Baltic region.

Moreover, it remains unclear what was the source of raw material for the metalworking activity in that region during the 6th and the 7th centuries. Particularly problematic is the origin of the silver that went into the manufacturing of the relatively large number of dress accessories—bracelets, torcs, belt mounts, strap ends, brooches—as well as ornaments of drinking vessels and weapons (e.g., scabbard mounts) that have been retrieved from 6th-century burial and hoard assemblages in the Baltic region.<sup>35</sup> No metallographic analysis has so far identified the source of iron ore, and the analysis of the copper-alloy artifacts strongly suggests the recycling of older artifacts and scrap metal. With no workshops so far identified, it is impossible to determine what exactly was recycled, although some believe that Roman-age artifacts, particularly coins, were the main source of bullion.<sup>36</sup> Such artifacts would have been procured by means of robbing graves of earlier cemeteries dated between the 2nd and the 4th-century.<sup>37</sup> However, the phenomenon of grave robbery is restricted to

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fig. 2/2; Skvorcov et al. (2017), 350–51; 351 fig. 11/1. See also Simniškytė (1998), 197–207; Bliujienė (2007), 131.

33 Kazakevičius (1987), 61–62.

34 Mandril: Bertašius (2005), 68–69; 212 pl. CIX/5. Engraving tools: Cehak-Holubiczowa (1955), 313–317; 317 fig. 7/1; Kaczyński (1963), 140–42, 146–47, and 148–49; 141 fig. 5n; 150 fig. 21d; 153 fig. 25j, k; Deemant (1978), 81–83; pls. VIII/7 and X/6; Kazakevičius (1993), 150 and 121 fig. 191/4; Graudonis (2003), 35–40; 39 fig. 32/4; Gričiuvienė/Grižas/Buža (2005), 37–40; Bertašius (2005), 88; 266 pl. CLXIII/6; Gričiuvienė (2007), 24–25; Hilberg (2009), 475–76; Jakobson (2009), 44 and 75. Engraving instruments also appear in hoards; see Urtāns (1977), 148; 147 fig. 52/30, 31.

35 Tautavičius (1996), 35. According to Oras (2015), in 6th-century Estonia, silver becomes suddenly the main material in wealth deposits.

36 Bliujienė (2013), 361–62.

37 Kurila (2008); Bliujienė (2016), 222. There is also evidence of contemporaneous graves being robbed. See Stankus (1984), 63; Butėnas (1998), 163; Bertašius (2005), 58–59.

a small region of Lithuania. There are no robbed graves in Prussia, Latvia, or Estonia. Moreover, while in southeastern Lithuania earlier graves were marked by barrows, and thus easy to spot, that is not the case for other parts of the Baltic region that have produced an abundance of metal finds dated to the 6th and 7th century. For example, the source of metal for the very large quantity of copper-alloy and silver artifacts, particularly dress accessories, found on sites with cremation cemeteries in northeastern Poland and the Kaliningrad region cannot be traced to earlier graves, which were typically located on different sites, and not marked at all. The alternative is that the metal came from the outside by means of plunder, tribute, or trade. The latter has in fact been invoked to explain the apparent stability and prosperity of communities in those parts of Prussia that are now divided between Poland and the Kaliningrad region of Russia. The people living along the lower course and in the delta of the river Vistula, as well as in the region of the Mazurian Lakes “thrived on the amber trade.”<sup>38</sup> Trade with Baltic amber along the supposed Amber Trail linking the Baltic region with Central Europe and Italy was invoked to explain the presence of bow fibulae in mortuary assemblages in northeastern Poland, as well as the “origin of the European economy.”<sup>39</sup> However, the distribution of 6th- and 7th-century finds of amber in East Central and Eastern Europe suggests an exchange system very different from the down-the-line trade postulated by historians and archaeologists alike.<sup>40</sup> Amber must have been harvested and processed in the Baltic region during the 6th and 7th centuries, as indicated by finds of raw amber in burial assemblages, even though no deposits of amber have been found.<sup>41</sup> Nothing indicates a large-scale production for the purpose of trade. Nor are any indications of commodities brought in large numbers

38 Bliujienė (2010), 29; Kontny (2011), 68; Rudnicki (2018), 66–67.

39 Werner (1933), 281–82; Werner (1950), 167; Werner (1984), 74–7; McCormick (2001), 693; Kazanski/Mastykova (2005), 125. For amber “trade routes” leading from the Sambian Peninsula and the Great Mazurian Lakes region to the north and to the east, via Lithuania, see Bliujienė (2011), 258. According to Bliujienė (2001), 183, “coastal merchants” sold the raw amber to the “local vendors” at the “markets” on the Lower Nemunas river. Similarly, Hilberg (2009), 311 postulates the existence of landing sites and “beach markets” on the shores of the Vistula Lagoon. There is absolutely no evidence to support either scenario. That does not stop archaeologists and historians alike from pushing the idea of a European-wide trade with Baltic amber. Even Wickham (2006), 808 associates the presence of amber beads in 6th- to 7th-century Britain with trade. See also Kolendo (1990).

40 Curta (2007). According to Hilberg (2003), 314, the archaeological record suggests “cross-regional elite communication.”

41 Kowalski (1985), 228 and pl. 1/11; Kulakov (1990), 61; Vaitkunsienė (1995), 48 and 101 fig. 141/3; Jagodziński (1997), 76–77; Skvorcov (2010), 31–32, 34, 54, 60–61, 119, and 121–22; 161 pl. XXVII/1; 247 pl. CXXIII/4; 327 pl. CCVII/5; 385 pl. CCLXIX/1. For earlier deposits of amber, see Wielowiejski (1987).



from elsewhere. Glassware, belt buckles decorated in animal style I, and a few Byzantine coins were clearly produced elsewhere, but they most likely reached the Baltic region through non-commercial exchanges, not trade.<sup>42</sup>

Non-commercial exchanges may have been gift giving between elite groups located at a considerable distance from each other. The existence of such elite groups in the Baltic region is well documented archaeologically. The cremations associated with horse burials found in the Sambian Peninsula (now the Kaliningrad region of Russia) at Pervomaisk, Kleinheide, Mitino, and Shosseinoe have produced a number of artifacts, primarily ornaments for the horse tack and the saddle, that are decorated in the so-called Germanic animal style I, which played an active part in creating a shared elite identity in contemporaneous Scandinavia and western Europe, although displayed primarily on female dress accessories.<sup>43</sup> At the opposite end of the Baltic region, in northern and northwestern Estonia—, a few richly furnished graves dated around 500 point to the display of social prestige. This is a completely novel phenomenon for a region with no traces of “ideological competition” in the archaeological record of the previous 300 years.<sup>44</sup> Exceptionally rich burials appear also in eastern Lithuania at about the same time; they have been interpreted as the graves of local “dukes.”<sup>45</sup> A diachronic analysis of mortuary practices in that region of Lithuania indicates that, judging by the number of richly furnished graves, the social segment of the elite diminished considerably around 500 AD, which strongly suggests that power was concentrated

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42 Glassware: Hilberg (2009), 443, 446, and 448. Buckle with animal style I ornament: Franzén (2009). Early Byzantine coins: Urtāns (1977), 137; Jagodziński (1997), 33; Dymowski/Orzechowska/Rudnicki (2012), 217–18 and 220; Skvorcov (2014); Zapolska (2018).

43 Skvorcov (2013) notes that in all known cases from the Sambian Peninsula, those were male burials accompanied by the graves of one or, in some cases, several horses. For animal style I and female dress accessories, see Halsall (2007), 48. Vaitkunskienė (1995), 99–100 believes that during the 6th century, some men were buried in central Lithuania together with their female attendants (slaves?), who were sacrificed for the occasion. For a similar idea applied to the region of northeastern Poland next to the border with Lithuania, see Kaczyński (1965), 196–97. For the animal style I in Scandinavia as the “language of power” of the (new) elites, see Behr (2010). For a detailed discussion of the elite burials in Pervomaisk, see Hilberg (2009), 311–30. For Mitino, see Skvorcov (2010), 95–96. For Shosseinoe, see Skvorcov/Khokhlov (2014); Skvorcov (2018).

44 Priit (1995), 227–29. For the cemetery in Proosa as illustrating a “violation of the balance” which had been established in previous centuries, and the rise to prominence of a local chieftain most likely by violent means, see Lang (1996), 473–76.

45 Kurila (2015), 54–55. For a similar interpretation of richly furnished burials accompanied by horse graves in western Lithuania and Latvia, see Bliujienė/Butkus (2009), 160.

in the hands of a few.<sup>46</sup> This change coincided in time with the standardization of grave good sets and the salient marking of warrior status in the burial ritual.<sup>47</sup> Male status was connected directly to military activity and the ideology surrounding it.<sup>48</sup> In that respect, the picture drawn on the basis of cemetery data from the Baltic region is very similar to that from the Carpathian Basin (see chapter 6). Much like elsewhere in Europe, the aristocrat of the 6th and early 7th century in the Baltic region was “increasingly likely to be armed and to have a warrior following.”<sup>49</sup>

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46 Kurila (2009), 170 notes that at the same time, burials of young males became considerably richer than those of elderly males, a sure indication of changing social roles. Older males, who had meanwhile lost their warrior status, were somewhat closer to females in their position in society. By contrast, female status remained stable in relation to age and seems to have been less affected by the social transformations taking place in local communities.

47 Jovaiša (2006), 12.

48 Kurila (2009), 182. For similar conclusions concerning the Sambian Peninsula, see Kazanski/Mastykova/Skvorcov (2017).

49 Halsall (2007), 495. For Mazurian belt sets with open-work decoration as badges of elevated social status indicating contacts with Merovingian and Avar-age elites, see Kulakov (2018), 101–02.

## Societies on the Edge: The Forest-Steppe Belt of Eastern Europe

The forest-steppe belt is an ecotone between the zones of closed forests and steppe grasslands. In this transitional zone, woodlands alternate with closed grasslands (meadow steppe), forming a landscape of mosaic appearance. The belt is extensive and runs across Eurasia from the foothills of the Carpathian Mountains in the eastern parts of modern-day Romania across Ukraine and Russia all the way to the Altay, although it is more fragmented to the east from the Ural Mountains. Typical for the forest-steppe belt are black soils (chernozems), which develop especially in environments with a higher moisture supply, such as stream valleys.<sup>1</sup> This explains why early medieval settlements tend to cluster along the main rivers crossing the forest-steppe belt from north to south—the Dniester, the Southern Bug, the Dnieper, the Donets, the Don, and the middle course of the Volga.<sup>2</sup> In the early stages of agricultural use (the first few years after plowing), the yields are usually high. Gradually, however, degradation of the physical and moisture properties of the soils occur, and the fertility of the chernozems starts to decline. Occupation on 6th- to 7th-century settlements in the forest-steppe belt of Eastern Europe was therefore relatively short, with communities moving around within a relatively restricted area (often up- or downstream), in search of new soils for cultivation.<sup>3</sup>

1 For a soil map of the forest-steppe belt in present-day Ukraine, see Gorbanenko/Pashkevich (2010), 80–81 fig. 3.4.

2 For the definition and soil features of the forest-steppe belt, see Chibilyov (2003), 249–50. For settlements clustering along major rivers, see Dovzhenok (1965), 32; Avdusin (1989), 136–37.

3 This was a form of itinerant agriculture not unlike that practiced in the Lower Danube region at the same time (see chapter 8). Nonetheless, the question of the anthropic influence upon the early medieval environment, particularly upon the soil, has been raised only for the forest-steppe belt of Eastern Europe. Some have even advanced the idea of an ecological crisis, the main reasons for which were supposedly podsolization (caused by slash-and-burn form of agriculture) and epizootics (itself caused by the depletion of soils of basic metals, especially cobalt). See Shevchenko (1997) and Shevchenko (2002), 139–42, 143, 149–51, and 199, who believes that to have been the cause of the emigration of the Slavs. There is no evidence either of slash-and-burn agriculture or of podsolization. On the other hand, both field rotation and manuring are only documented for the later period. See Gorbanenko/Zhuravl'ov/Pashkevich (2008), 156; Prykhodniuk/Gorbanenko (2008), 56.

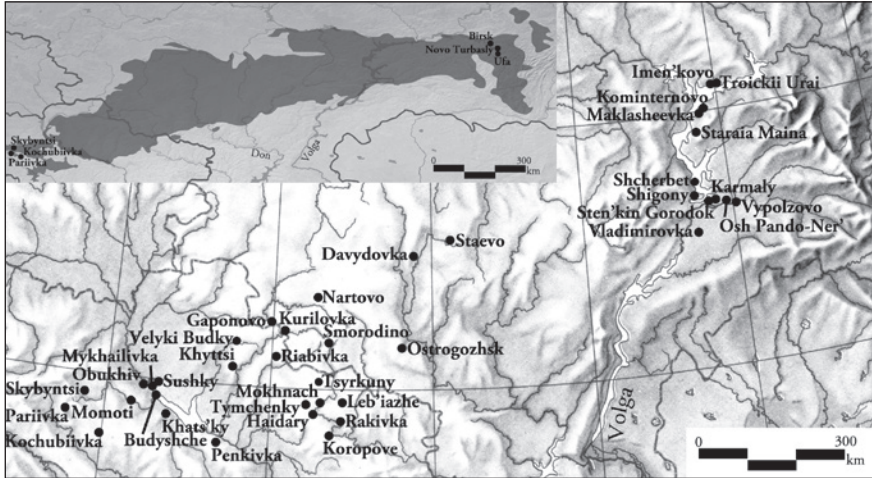


FIGURE 23 Principal sites mentioned in the text and in the notes. The insert (shaded area) shows the extension of the forest-steppe belt in Ukraine and Russia. Base map for insert Ecoregion PA0419

PUBLIC DOMAIN, [HTTPS://COMMONS.WIKIMEDIA.ORG/WIKI/](https://commons.wikimedia.org/wiki/File:Ecoregion_PA0419.SVG)

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Because of the early development of paleobotanical and zooarchaeological studies in the Soviet Union, Eastern Europe (Ukraine and Russia) is now the region with the most advanced research on the economic profile of early medieval populations.<sup>4</sup> The examination of over 2,000 ceramic fragments from the settlement excavated in Pen'kivka (near Kremenchuk, Ukraine; Fig. 23) revealed imprints of cereal seeds, the largest number of which are of millet, followed by barley. The same is true for paleobotanical samples from Kochubiivka (near Uman', Ukraine).<sup>5</sup> By contrast, at Riabivka (near Sumy, eastern Ukraine) the predominant crops were millet and emmer.<sup>6</sup> Millet and barley were also the most important crops for the inhabitants of the stronghold excavated in Osh Pando-Ner', on the southern side of the Samara Bend, at the opposite end of

4 For a history of paleobotanical research in the Soviet Union, see Gorbanenko/Pashkevich (2010), 11–15 and 22–28. Two early studies pertaining to the period (6th to 7th centuries) considered in this book are worth mentioning here, namely Stepanov (1956) and Dovzhenok (1965). By the 1980s, paleobotanical studies in the Soviet Union had far-reaching programmatic goals, for which see Pashkevich (1988).

5 Pashkevich (1998), 43; Gorbanenko/Pashkevich (2010), 155–56, 194, and 196; 187 fig. 6.10. Nonetheless, when applying the ratio of the mass of grains, the main crop appears to be barley, not millet; see Gorbanenko (2015), 309.

6 Gorbanenko/Pashkevich (2010), 157 and 56 table 2.10.

the forest-steppe belt from Pen'kivka and Kochubeivka.<sup>7</sup> A great number of quern finds indicate the processing of cereal seeds.<sup>8</sup> In the rare cases where provenance could be established, querns turned out to be made of local rock, such as the volcanic tuff of the Vinnitsa region of Ukraine.<sup>9</sup> There is also a great number of clay pan finds, which point to the preparation and consumption of flat loaves of bread.<sup>10</sup> But no plowshares or coulter have been found that could be linked to 6th- or 7th-century tillage. Reaping, however, is documented by finds of sickles and scythes.<sup>11</sup> While the former are less curved, the latter are

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- 7 Viazov (2001), 60; Bogachev (2013), 133. By contrast, farther to the north, at Troickii Urai (across the Kama from Chistopol, Tatarstan), only barley seeds have been found; see Tuganaev/Tuganaev (2007), 41 and 40 table 6. Seven charred seeds of wheat have been found in the filling of a grave pit under barrow 9 in (Novo) Turbasly (near Ufa, Bashkortostan); see Mazhitov (1959), 124.
- 8 Kalinin/Khalikov (1960), 231–232 and 245; Khavliuk (1963), 204, 207, 208, and 345; Petrov (1963), 213 and 218; Prykhodniuk (1975), 83 and 101; Starostin (1977), 32 and 37; Shramko (1980), 76 and 75 fig. 2/10; Goriunov (1981a), 122; Prykhodniuk (1990), 90; Matveeva/Morozov (1991), 175; Prykhodniuk (2005), 23 and 127 fig. 21/12; Kashkin/Rodinkova (2010), 90. A few fragments of querns have been found during field surveys and can therefore be dated to the 6th or 7th centuries only tentatively; see Khavliuk (1974), 211; Prykhodniuk (1975), 88.
- 9 Khavliuk (1963), 204.
- 10 Khavliuk (1963), 321, 322, 334, 339, 342, and 345; 331 fig. 6/12, 13; 336 fig. 15/9, 10; Petrov (1963), 213 and 218; fig. 7/12; Il'ins'ka (1968), 58 and 59 fig. 2/9, 10; Tikhanova (1971), 9–10; Baran (1972), 181 and 182 fig. 58/12; Khavliuk (1974), 190, 198, 199, 204, 207, 210–213, and 215; Prykhodniuk (1975), 83–85, 87, 101, 102, 106, 107, and 108; 34 fig. 15/9; 130 pl. XX/5, 12; 132 pl. XXII/20–23; 133 pl. XXIII/7; 134 pl. XXIV/14–20; 137 pl. XXVII/15; 138 pl. XXVIII/7, 8, 17–19; 139 pl. XXIX/9; 140 pl. XXX/13; Gening (1976), 128 and 129 fig. 18/13; Prykhodniuk (1979), 85 and 86 fig. 3/10; Prykhodniuk (1980), 128 and 131; 37 fig. 16/16; Shramko (1980), 76 and 75 fig. 2/8, 9; Goriunov (1981a), 116, 118–20, and 122–24; 115 fig. 37/2; 120 fig. 43/7; 122 fig. 46/15; 124 fig. 48/2; 125 fig. 49/1, 2; 126 figs. 50/3 and 51/14; 130 fig. 55/1, 2; Goriunov (1981b), 63 and fig. 2/15; Abashina (1986), 73 and 83; 81 fig. 7/19; Mikheev/Prykhodniuk (1986), 76–78; 77 fig. 3/3; 79 fig. 5/5–9; Khavliuk (1988), 228–29; Prykhodniuk (1990), pp. 86, 90–91, and 94; 103 fig. 8/14; 101 fig. 6/13, 14; 104 fig. 9/14–16; 106 figs. 11/2 and 12/12; 108 fig. 14/8, 9, 13; Berestnev/Liubichev (1991), 33 and 36; 34 fig. 1/25–30; D'iachenko/Prykhodniuk/Petrenko (1991), 26–27 and 30; 29 fig. 4/5, 7; 31 fig. 6/5; 32 fig. 8/2, 4, 5, 10, 11, 16; Shovkopliias/Gavritukhin (1993), 54 and 55 fig. 2/12; Abashina (2004), 281, 283, and 286; 280 fig. 2/7; 286 fig. 6/15; 296 fig. 13/13, 16; Buinov/Sergeev (2012), 11. Several other fragments of clay pans have been found during field surveys and can be dated only tentatively to the late 6th or 7th century. See Il'ins'ka (1968), 77; Telegin/Beliaeva (1975), 105 and 100 fig. 4/6; Prykhodniuk (1980), 127, 130, 136, 138, and 139; Liubichev (2001), 113 and 114 fig. 2/3; Oblomskii (2012), 197 and 229 fig. 24/8, 9; Suprunenko (2012), 148 and fig. 11/6.
- 11 Sickles: Kukharenko (1952), 36 and 39; 38 pl. 1/3; 40 pl. 11/7; Kalinin/Khalikov (1960), 244; Petrov (1963), 218 and 222 fig. 6/6; Khavliuk (1974), 204 and 202 fig. 11/22; Shramko (1980), 75 and 76 fig. 3/1; Abashina (1986), 73 and 82 fig. 8/1; Prykhodniuk (1990), 90; Kazakov (1993), 103 and 105 fig. 1/29; Viazov/Semykin (2016), 88 and 224 fig. 57/3. Scythes: Prykhodniuk

shorter than the corresponding tools of both the earlier and the later period.<sup>12</sup> Such details suggest small-scale production, but next to nothing is known about the size, location, or management of fields.

Despite the early development, shortly after World War II, of studies of animal bone assemblages, zooarchaeology has not yet shed sufficient light upon the role of stock breeding in 6th- to 7th-century communities in the forest-steppe belt of Eastern Europe. Animal bones have been found in great numbers on all sites, but only in a few cases have they been properly analyzed. Cattle, followed either by pig or by sheep are the dominant species both in the western and in the eastern parts of the belt.<sup>13</sup> In the Middle Volga region, remains of cattle indicate clearly that a large number of animals were slaughtered at a relatively young age, which suggests that they were kept for meat, not for dairy.<sup>14</sup> Unlike the western parts of the forest-steppe belt, there is a significant presence of poultry (chickens and geese) in assemblages of the Middle Volga region, particularly the Samara Bend.<sup>15</sup> In both the western and the eastern regions of the forest-steppe belt, there is a substantial presence of wild animals, both game and fur species. Besides deer and elk, bear, otter and beaver must have been hunted for pelts.<sup>16</sup> The most remarkable zooarchaeological finds are camel bones that appear on four different sites in the Middle

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(1990), 89 and 108 fig. 14/27; Abashina (2004), 286; Viazov/Semykin (2016), 88 and 224 fig. 57/2. According to Gorbanenko/Pashkevich (2010), 106, the plowshare discovered in Tymchenky [near Kharkiv, Ukraine; Berestnev/Liubichev (1991), 33 and 34 fig. 1/5] must be dated to the third quarter of the 7th century. However, it was not found in any of the settlement features excavated on that site and it may well be of a later date.

- 12 Gorbanenko/Pashkevich (2010), 209, 215, and 248; 249 fig. 8.3. Besides an oval pit from Obukhiv [Abashina (1986), 83 and 79 fig. 6/3], which may have served for storage, no silos have been found on any 6th- to 7th-century settlement site in the forest-steppe belt of Eastern Europe.
- 13 Zhuravlev (2005–2009); Bogachev et al. (2013), 133–34 and 142 table 5. Cattle and sheep bones appear also in burial assemblages: Akhmerov (1951), 133; Mazhitov (1959), 116, 117, 119, and 120; Mazhitov (1968), 84, 101, and 104; Goriunova (2004), 20 and 24. Sheep and pig: Gening (1976), 130; Bogachev et al. (2013), 142 table 5; As'keev/Galimova/As'keev (2012), 13 and 14–15 table 3. At Obukhiv (near Kiev), the dominant species is pig, followed by cattle; see Zhuravlev (2016).
- 14 Petrenko (1998), 201–02 and 203. Unlike the western parts of the forest-steppe belt, faunal assemblages in the Middle Volga region show that horses were also raised for meat, as many animals were also slaughtered at a relatively young age.
- 15 As'keev/Galimova/As'keev (2012), 12; As'keev/Galimova/As'keev (2013), 121 and 119 table 1. This is the earliest archaeological evidence of domestic fowls known so far from the region.
- 16 Petrenko (1998), 204–05; Bogachev et al. (2013), 126, 134 and 142 table 4; Zhuravlev (2016), 176–77 and 181–82; Goriunova (2004), 24; Mazhitov (1968), 84; Matveeva (2003), 43; As'keev/Galimova/As'keev (2012), 13 and 14 table 3.

Volga region, next to its confluence with the Kama.<sup>17</sup> Those were Bactrian camels likely associated with the caravan trade, the most important commodity of which must have been the pelts.

The same trade network was responsible for the presence in the Middle Volga region of Sassanian coins.<sup>18</sup> Three drachms of Kavad I (struck in 519, 524, and 527, respectively), and three others of Khusro I (struck in 538, 541, and 545, respectively) have been found together with a strap end, a silver torc, two fragments of a quern, and an armor plate in a small hoard buried in Karmaly (near Togliatti, in the Samara region).<sup>19</sup> Two other drachms, one struck for Peroz (457–483), the other for Kavad (first reign, 488–497) are known from Troickii Urai, near the confluence of the Volga and the Kama rivers. A few more drachms have been found downstream, along the lower course of the Volga, but the largest number of Sassanian coins is from sites in the Ural region around Perm (see chapter 15).<sup>20</sup> By contrast, only Byzantine coins are known from the central and western parts of the forest-steppe belt in Eastern Europe.<sup>21</sup> Along the same trade routes that brought Sassanian coins to Eastern Europe also came the pieces of Sassanian metalwork deposited in rich graves or hoarded, such as a silver pitcher and a silver plate from Ufa (Bashkortostan).<sup>22</sup> Fragments of silk fabric found in another grave discovered in Ufa may also be associated with the trade routes from Central Asia.<sup>23</sup> Commodities moving along those routes also reached the western parts of the forest-steppe belt, for items in the hoards from Ostrogzhsk (near Voronezh, Russia) and Khats'ky (near Cherkasy, Ukraine; Fig. 24) were found wrapped in silk.<sup>24</sup> Those are the only textile remains known for this period from entire the forest-steppe belt of

17 Calkin (1958), 273; Starostin (1967), 27; Petrenko (1984), 110 and 133; As'keev/Galimova/As'keev (2012), 14 table 3. The first to connect the presence of camel bones with the fur trade was Kovalev (2005), 65–66.

18 Morozov (1995).

19 Matveeva/Morozov (1991), 172–73, 175, and 176; 183 fig. 5; 184 fig. 6. The coins were inside a handmade pot, a clear indication of a hoard.

20 Morozov (1995); Morozov (2005). For a distribution map of Sassanian coin finds, see Morozov (1996), 163 fig. 1.

21 Shovkopliias (1957), 101 and 102 fig. 1; Alikhova (1959), 133; Goriunov/Kazanski (1998), 76; Andreev/Filimonova (2009), 23 and 20 fig. 2/5. From Byzantium came the amphorae found on several sites in the Middle Dnieper region: Berezovets' (1963), 157 and fig. 14/2–4, 8–10; Shovkopliias (1963), 138 and 140; 140 fig. 2/1, 2; Rutkiv's'ka (1974), 36; Prykhodniuk (1980), 130 and 63 fig. 44/9; Abashina (2004), 281 and 283; Priimak (2004), 287 fig. 3B. From Byzantium are also the bronze weights discovered in the forest-steppe belt: Menghin (2007), 365; Oblomskii/Shvyrev (2018), 307 and 308 fig. 1.

22 Akhmerov (1951), 133; Trever/Lukonin (1987), 109 and pls. 20–21.

23 Akhmerov (1951), 125.

24 Korzukhina (1996), 372; Berezuckii/Zolotarev/Kucev (2017), 132.

Eastern Europe.<sup>25</sup> There are in fact very few indications of weaving, and none from a settlement context.<sup>26</sup>

Similarly, the evidence for non-ferrous metallurgy is problematic. Just because crucibles and scrap metal, slag, and moulds have been found during the excavation of sunken-floored buildings, such settlement features are not necessarily “workshops,” and the sites are not automatically “industrial centers,”<sup>27</sup> In fact, the slag, the crucible, the two moulds, and the engraving tool from Skybyntsi (near Bila Tserkva, Ukraine) have been found in the filling of a sunken-featured building, not on its floor.<sup>28</sup> The same is true for the crucibles, the dies, the ladles, the scrap metal, and the slag discovered in Pariivka (near Vinnytsia, Ukraine) and in Shcherbet’ (near Togliatti, now under the water of the Kuibyshev Reservoir).<sup>29</sup> The circumstances in which those artifacts ended up in the filling of what must have by then been abandoned houses remain uncertain, even though their association in itself is indicative of metalworking

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- 25 The fragment of a lead ingot found in the large hoard accidentally discovered in 1994 in Gaponovo (near Kursk, Russia) has a positive imprint of tightly woven fabric on the back. See Gavritukhin/Oblomskii (1995), 43 fig. 7/10. Gavritukhin/Oblomskii (1996), 7 believe that the imprint is from the textile bag or cover in which the hoard components were wrapped before being buried. Leaving aside the fact that no other artifacts in the hoard present traces of textiles, the “imprint” is more likely the result of a special casting procedure known as “lost wax and lost textile,” for which see Curta/Szmoniewski (2019), 162–65.
- 26 Although there are many spindle whorls in 6th- to 7th-century assemblages in the forest-steppe belt of Eastern Europe, only two loom weights are known. That from Leb’iazhe (near Kursk, Russia) is from a cremation burial, while that from Davydovka (near Lipeck, Russia) is a stray find. See Lipking (1974), 151; Andreev/Filimonova (2009), 20 fig. 2/15. Needless to say, none of those finds can be dated with any degree of accuracy (in the absence of an adequate illustration, it is not even certain that the Leb’iazhe find is a *loom* weight). For spindle whorls, see Prykhodniuk (1998), 35; Volodarets’-Urbanovych (2017), 91–92.
- 27 Khavliuk (1988), 227–29; Vynokur (1998), 24; Shcheglova (2006).
- 28 Khavliuk (1961), 191–92; 193 fig. 6/3, 4.
- 29 Khavliuk (1988), 228; Sidorov/Starostin (1970), 234 and 236 fig. 2/8. Crucibles have also been found in the filling of a house and in a refuse pit on the settlement site excavated at Khytysi (near Lubny, Ukraine), for which see Goriunov (1981), 119 and 124; 80 fig. 29/14; 122 fig. 46/3; 132 fig. 57/5. There was slag on the hearth of the sunken-floored building discovered in Mykhailivka (near Kaniv, Ukraine), but it is not clear whether the crucible was found on the floor or in the filling; see Prykhodniuk (1979), 85 and 86 (fig. 3/12). Only at Budyshche (near Cherkasy, Ukraine) has a crucible been found on the floor of a house, but without any goldsmithing implements. Moreover, judging by the associated Gray Ware, that house may be of a late 7th- or even early 8th-century date; see Prykhodniuk (1990), 88. For crucibles, ladles, moulds, and slag from strongholds in the Middle Volga region, see Kalinin/Khalikov (1960), 242 and 243 fig. 6/15; Matveeva (1968), 116 and 118 pl. 4/7; Bogachev et al. (2013), 132 and 159 fig. 22/1. For another crucible found in a stronghold farther to the northeast, see Shamsutdinov et al. (2015), 75 and 318 fig. 310/1.



activities somewhere nearby. On the other hand, ladles appear on settlement sites and in strongholds, as well as in graves, but, like in the forest belt (see chapter 13) and unlike the Carpathian Basin (see chapters 6 and 7), they were deposited more often in female than in male graves.<sup>30</sup> No less than 10 moulds are known from Tsyркuny (near Kharkiv, Ukraine), but it is not clear whether they all belonged to the same assemblage.<sup>31</sup> When plotting on a map all finds of moulds, ladles, dies, half-manufactured products and scrap metal, two areas stand out—one in the Middle Dnieper region between Kiev and Kremenchuk, the other in the lands between the rivers Seym and Oskol, in Left-Bank Ukraine.<sup>32</sup> Unfortunately, because most finds are without archaeological contexts (either stray finds or from the filling of settlement features), the organization of labor remains unclear.<sup>33</sup> It is clear, however, that as in the Lower Danube region (see chapter 8), small dress accessories and ornamental details were made by one-piece mould casting. Unlike that region, however, there are no moulds for the production of bow fibulae.

Trasological examination of the backs of bow fibulae found in the Middle Dnieper region has revealed that casting was done in clay moulds. Ekaterina Shablavina has conducted an archaeological experiment to illustrate the technological procedure in question. Using a wooden template, she obtained a ceroplastic work, which she then used to produce a bar of clay tempered with 40 to 60 percent crushed shards and sand. The bar was first dried and fired at a temperature between 800 and 900 centigrades, as a result of which the wax melted and a “negative” fibula was thus obtained. Next, molten metal was poured into the hollow clay bar and when the metal became cold the bar was broken and the decoration of the brooch could be further refined or gilded.<sup>34</sup>

The emission spectrum analysis of some bow fibulae showed that they were made of a copper-alloy with a concentration of between 20 and 32 percent

30 Akhmerov (1951), 131. For settlement finds, see Khavliuk (1974), 197 and 202 fig. 11/23, 25; Kazakov (1993), 102 and 105 fig. 1/32; Oblomskii (2012), 189 and 224 fig. 19/7, 8. A ladle and a mould for casting pendants have been found in a stronghold at Nartovo (near Kursk, Russia); see Puzikova (1978), 55 and 52 fig. 3/18, 19. For other ladles from strongholds, see Kalinin/Khalikov (1960), 242; Matveeva (1968), 113 and 116; 118 fig. 4/5. For finds from field surveys, see Prykhodniuk (1980), 138.

31 Buinov/Sergeev (2012), 12; 16 fig. 3; 17 fig. 4; Volodarets'-Urbanovych/Buinov (2017).

32 Volodarets'-Urbanovych (2017), 342 fig. 7.

33 Kalinin/Khalikov (1960), 242 and 243 fig. 6/16; Khavliuk (1963), 321 and 334 fig. 13/12; Starostin (1967), 28 and 93 pl. 23/1; Rudenko (1991), 73; Prykhodniuk (1998), 153; Volodarets'-Urbanovych (2017), 332 and 339; 33 fig. 1/1, 2, 5; Volodarets'-Urbanovych (2018), 107–13.

34 Shablavina (2001), 312–14; Shablavina (2004), 246.

zinc.<sup>35</sup> Other dress accessories were made of tin-copper alloy.<sup>36</sup> Craftsmen in the forest-steppe belt of Eastern Europe were capable of obtaining brass by heating a mixture of copper and calamine (zinc ore) to a high temperature for several hours, in order to allow the zinc vapors to permeate the copper. That they relied on collections of scrap metal is well illustrated by the hoard found in Velyki Budky (near Sumy, northeastern Ukraine), in which a pair of bow fibulae (Werner's class I C) was associated with a fragment of another fibula with scrollwork decoration, fragments of bracelets, torcs, earrings, and various bits of scrap silver and lead.<sup>37</sup> Broken fibulae and fragments of lead have also been found in another hoard from Smorodino (near Belgorod, Russia).<sup>38</sup> No such collections of scrap metal are known from the eastern parts of the forest-steppe belt, along the middle course of the Volga River. Nor are there any parallels in that region to the relatively frequent use of pressing dies for the production of belt mounts, such as found on settlement sites at Pariivka and as stray finds in the Middle Dnieper region.<sup>39</sup> Some of those dies have good analogies in the Carpathian Basin (e.g., at Felnac), and like them, have been interpreted as of Byzantine origin.<sup>40</sup> The coexistence of the die pressing technique with casting also reminds one of the situations discussed in chapter 7. Unlike the Carpathian Basin, however, there is a prominent presence of smelting and blacksmithing, albeit at the eastern end of the forest-steppe belt of Eastern Europe, along the Middle Volga River.

35 Egor'kov/Shcheglova (2001), 287, 304, and 306; Egor'kov/Shcheglova (2006), 23. See also D'iachenko (1978), 32. The presence of between 10 and 30 percent zinc in the alloy signals the cementation process. By contrast, gunmetal (an alloy of copper with tin and zinc) appears only occasionally. Out of all artifacts from the hoard discovered in Kurilovka (near Kursk, Russia), only one strap end was made of gunmetal. See Egor'kov/Rodinkova (2014), 173 and 175; 171 fig. 2/15.

36 Shcheglova/Egor'kov (2000), 111; Egor'kov/Shcheglova (2000); Egor'kov (2012); Saprykina (2014).

37 Goriunova (1992); Szmoniewski (2008), 278–80. The two fibulae from the Velyki Budky hoard, however, were not made of brass, but of bronze with a high concentration of tin (70 and 71 percent, respectively). See Goriunova/Rodinkova (1999), 217. According to Rodinkova/Saprykina (2011), 93, diadems were plated with silver originating from scrap metal; see also Saprykina et al. (2017). For the use of silver in surface enrichment, see Kidd/Pekars'ka (1995), 352. According to Rodinkova/Egor'kov (2017), 278–81, silver was also identified in the billon out of which many ornaments in the Sudzha-Zamost'e hoard were made.

38 Korzukhina (1996), 402–403 (where the find is interpreted as a cremation burial); 650 pl. 60/1–17.

39 Khavliuk (1988), 228; Korzukhina (1996), 353, 369, and 408; 682 pl. 92/1–6, 8–11, 13, 16; 684 pl. 94/22; Rác (2016), 177–78; 176 fig. 1. For dies in the central part of the forest-steppe belt, see Oblomskii/Shvyrev (2018), 311 and 313 fig. 4/2–6.

40 Rác (2016), 179.

Remains of a smelting furnace have been found at Karmaly on the south-western side of the Samara Bend peninsula, across the Volga from Zhigulevsk (Samara region, Russia). This was a furnace dug relatively deeply into the ground, with an opening on the side, which served for the removal of the bloom and was accessible from a large pit excavated on the southern side. Post holes around the top of the shaft suggest that there was a roof above the furnace, most likely meant to make it operational under inclement weather. The iron ore was brought from sedimentary-alluvial formations located less than a mile away from the furnace.<sup>41</sup> Recent excavations on the northern side of the stronghold in Tetiushi (southern Tatarstan), on the right bank of the Volga, near its confluence with the Kama, brought to light the remains of two above-ground smelting furnaces, the earliest of which was built in an abandoned household pit. After the second one was dismantled, smelting on the site was done in simple pits of smaller size.<sup>42</sup> Three other smelting furnaces have been found at Shigony, not far from the western end of the Kuibyshev Reservoir, on the right bank of the Volga. One of them was dug into the ground (shaft furnace), but the other two were built above the ground, as in Tetiushi, using clay and sand, with side openings for tuyeres and for removing the bloom. A large, oval pit by one of the two built-up furnaces may have served as workshop, judging by the large quantity of slag found there.<sup>43</sup> It is unlikely that that workshop was a smithy, and no such facility has so far been found on any site in the forest-steppe belt. However, iron may have reached local smiths in the form of axe-shaped ingots, of the same metallurgical quality and shape as that of similar artifacts known from the region during the 3rd to 5th centuries.<sup>44</sup> The smelting sites at the eastern end of the forest-steppe belt have no parallel in the western regions.<sup>45</sup> The earliest evidence of special smelting and ironworking

41 Semykin (1993), 132–34; 136 figs. 2–4.

42 Rudenko (2019), 16–28; 23 figs. 5 and 6; 25 fig. 8.

43 Semykin (1998), 168–72; 179 fig. 6; 180 fig. 7; 182 fig. 10; 183 fig. 11. For more furnaces at Maklasheevka 2 and Rozhdestveno 4 (in Tatarstan), see Matveeva (2003), 43.

44 Rozanova/Terekhova (2000), 137–38 draw a parallel to similar artifacts known from 9th-century assemblages in Central Europe. The analogy is indeed surprising and difficult to explain. Axe-shaped ingots in Moravia and Poland have been interpreted as “currency bars” (pre-monetary exchange tokens), but may have in fact served as tribute and debt payments; see Curta (2011a). Whether or not such an interpretation applies to the earlier axe-shaped ingots in the Middle Volga region remains unclear.

45 Oblomskii (2017) has dated a site at Staevo (near Tambov, Russia) between the 5th and the 7th century on the basis of a few bow fibulae (some broken) and a shoe buckle. The site produced a large quantity of slag and ore, and at least one settlement feature was used for roasting the iron ore. However, all chronologically sensitive artifacts have been found either without an archaeological context or in the filling of the features. There may well

facilities and in those regions cannot be dated before the late 7th century.<sup>46</sup> Metallographic analyses have shown that the knives found in the Middle Volga region were made in the sandwich technique, whereby a few strips of iron and steel were welded together and folded.<sup>47</sup> The same technique was also used for knives found on settlement sites in the western parts of the forest-steppe region. In addition, some of them were made with steel edges butt-welded to phosphoric iron backs.<sup>48</sup> Where did the blacksmiths get the iron? And where did they work to make such tools, as well as a few other varieties of iron artifacts found on sites in the western region? In the absence of any smelting facilities and smithies, it may be that blacksmithing in the western region was done “on the side,” within the household, and without any specialists.<sup>49</sup> The same applies to the evidence of bone and antler working, all of which derives from assemblages associated with simple dwellings.<sup>50</sup> There is also no indication

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have been a 6th-century occupation on the site, but the ironworking activity belongs to an earlier occupation.

- 46 Braychevs'ka (1959); Khavliuk (1988), 230; Nedopako (1998). The smelting furnace found in Sushky (near Kaniv, Ukraine) has been dated to the 6th or 7th century only on the basis of the pottery found in other settlement features. The settlement, however, may be of a date earlier than AD 500; see Prykhodniuk (1990), 97.
- 47 Kondrashin (2001). Vypolzovo (across the Volga river from Samara) is not too far from the smelting site at Rozhdestveno. For different techniques used for the production of axes and sickles found in the region of the confluence between the Kama and the Volga, see Perevoshchikov (2002), 71–72.
- 48 Gopak/Goriunova (1991), 238–40; Voznesens'ka/Nedopako/Pan'kov (1996), 43–44; 46 fig. 8.
- 49 This hypothesis is confirmed by finds of slag in settlement features that may be interpreted as dwellings; see Khavliuk (1963), 339 and 346; Goriunov (1981), 122; Khavliuk (1988), 228; Prykhodniuk (1990), 90. For slag found in the filling of settlement features, see Khavliuk (1961), 192; Khavliuk (1988), 228; A.G. D'iachenko et al., ‘Kompleksy I tys. n.e. selishcha Zanki (po raskopkam 1976 g.)’, in D'iachenko/Prykhodniuk/Petrenko (1991), 27.
- 50 Sukhobokov (1975), 29 and 40 fig. 15/3–6, 8; Goriunov (1981), 117–18 and 68 fig. 21/4, 7. For half-manufactured bone products from the eastern parts of the forest-steppe belt, see Gening (1976), 128–29 and 129 fig. 18/3. Awls are the most common product of bone- and antler-working activities on sites in the western part of the forest-steppe: Khavliuk (1974), 190 and 204; 189 fig. 5/7; Sukhobokov (1975), 29 and 40 fig. 15/1, 2, 9; Goriunov (1981), 104, 120 and 124; 68 fig. 21/3, 8; Abashina (1986), '82 and fig. 8/3; Prykhodniuk (1990), 89–90 and 108 fig. 14/12. Other bone artifacts, such as combs and composite bow reinforcement plates have also been found in dwellings, sometimes in association with half-manufactured products indicating that bone-working activity; see Goriunov (1981), 118 and 120; 68 fig. 21/1, 9; Viazov/Semykin (2016), 86 and 220 (fig. 53/1). In the Middle Volga region, awls were occasionally deposited in graves. See Bagautdinov/Bogachev/Zubov (1998), 30 and 172 fig. 74/18; Kruglov (2005), 109 fig. 10/26, 28, 29. Bone arrowheads were deposited in graves only in the Middle Volga region; see Mazhitov (1968), 96, 97, 100 and 105; 138 fig. 15/16, 16; Akbulatov/Garustovich/Obydenov (1985), 135; Bogachev/Ermakov/

of kilns or specialized potters, as prior to ca. 680, all pottery produced in the forest-steppe belt was handmade.<sup>51</sup>

One of the most interesting aspects of the archaeology of the eastern parts of the forest-steppe belt of Eastern Europe during the 6th and 7th centuries is the hierarchical organization of the settlement pattern. Unlike the western parts, where only open settlements have been found, several strongholds are known from the Middle Volga region and the lands between the Volga and the Upper Sura river.<sup>52</sup> Some of them have been thoroughly excavated, e.g., Imen'kovo, near the confluence of the Volga and the Kama.<sup>53</sup> Others, like Karmaly and Sten'kin Gorodok (on the western side of the Samara Bend), have small precincts enclosed by double ramparts.<sup>54</sup> That was a relatively poor defense, and the lack of any indications of military functions prompted scholars to conclude that strongholds of the Middle Volga region were not forts, but central places of local, small networks of open settlements.<sup>55</sup> It has been suggested that only one or two families lived in each stronghold, for no more than a couple of settlement features (dwellings) have been found in any of them.<sup>56</sup> At Staraia Maina, a very large, above-ground building (5.5 by 12.6 m) has been interpreted as "longhouse," an elite residence.<sup>57</sup> That strongholds may have been seats of power results also from the presence of collections of valuables, such as the hoard of silver found in Karmaly.<sup>58</sup> At Maklasheevka 2 (southern Tatarstan), a stronghold located at the mouth of the Utka river (on what is now

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Khokhlov (1996), 87 and 98 fig. 5/5; Bagautdinov/Bogachev/Zubov (1998), 33 and 187 fig. 89/1, 2.

- 51 Salugina (1988), 137. The bone artifacts (some made out of animal ribs) found in several settlement features excavated in Kochubiivka [Prykhodniuk (1990), 90–91] may have been used for smoothing the surface of pots, prior to firing. According to Liubichev (1993), 30, a half-manufactured artifact made of amber was found in a refuse pit of a small settlement excavated at Rakivka (near Kharkiv, Ukraine). The early medieval character of the occupation on that site, however, remains to be demonstrated. In other words, it is not at all certain that such evidence of a household-based processing of raw amber imported from the Baltic region may be dated to the 6th or 7th century.
- 52 For the densely populated area of the Upper Sura river, and the role of strongholds in the settlement pattern of that region, see Viazov/Semykin (2016), 83.
- 53 Kalinin/Khalikov (1960). Equally well explored archaeologically is Staraia Maina (near Ul'ianovsk, on the left bank of the Middle Volga), for which see Matveeva (1987); Matveeva/Nabokov/Kochkina (1991); Matveeva (1994).
- 54 Bogachev and al. (2013), 121–25; 144 fig. 2; 147 fig. 6.
- 55 Viazov (2001), 59 and 65 fig. 2; Bakhshiev/Kolonskikh (2016). As Nikitina (2017), 64–66 has noted, strongholds were already present in the Middle Volga region during the 4th and 5th centuries.
- 56 Viazov (2001), 59.
- 57 Bogachev (1991).
- 58 Bogachev and al. (2013), 124; 153 fig. 15; 154 fig. 16.

the northeastern shore of the Kuibyshev Reservoir), no less than 86 silos have been found, some larger than others. This strongly suggests the accumulation of food reserves in the stronghold, perhaps as a form of tribute payment.<sup>59</sup>

There are no strongholds in the western parts of the forest-steppe belt that could be dated, with any degree of certainty to the 6th and first half of the 7th century.<sup>60</sup> Nor is there any evidence of silos or any other special facility on any of the open settlements excavated in the region. Despite the occasional use of burial mounds, cemeteries with either urn or pit cremations have not produced any evidence of social differentiation.<sup>61</sup> If male burials in the steppe lands were of prominent men from communities farther up north (see chapter 9), then inhumations with female or child skeletons that have been found in the forest-steppe belt may also be interpreted as high-status burials. Two out of four graves in a small cemetery excavated in Riabivka (near Okhtyrka, Ukraine) were of children. In one of them, the skull and limbs of a horse were buried on top of a 10- to 11-year old child, a practice with good parallels in contemporary burials of high-status males in the steppe lands.<sup>62</sup> A 25- to 30-year old woman was given an elaborate burial in a tomb found in Mokhnach (near Kharkiv, Ukraine). The skeleton was placed in a niche together with a great number of dress accessories (diadem, ear- and lock-rings, torcs, three fibulae, two of which were connected with a chain, bracelets, and a necklace including over 100 amber beads) and other “exotic” goods, such as two cowries (*Cypraea tigris* and *Cypraea Arabica*).<sup>63</sup> The many silver belt fittings recently found by metal detector on the neighboring site at Haidary may have also been from a

59 Starostin (1967), 14–15 and 65 pl. 9.

60 The earth(-and-timber) fortification in Velyki Budky (near Nedryhailiv, Ukraine) is most likely of prehistoric, not early medieval date; see Il'inska (1968), 60; Goriunov (1981), 106. The same is most likely true for Pastyr's'ke; see Prykhodniuk (2005), 7–9. The fortifications in Koropove (near Kharkiv, Ukraine) and Momoti (near Bila Tserkva, Ukraine) have not been explored archaeologically, so their dates cannot be established. See Prykhodniuk (1979), 93; Koloda (2016), 66.

61 Petrovskaia/Telegin (1965); Berezovets' (1969), 67–69; Lipking (1974), 136–37, 140–41, 147–51; Symonovich (1974), 153; Goriunov (1981), 99; Goriunova (2004), 18–22; Suprunenko (2012), 131 and 134. For burial mounds, see Bobrinskii (1901), 73; Goriunov (1981), 106; Oblomskii/Priimak/ Terpylovs'kyi (2011), 15–17. On cemetery sites with burial mounds, there is no difference between barrows. There is also no difference between cremations with and those without barrows.

62 Oblomskii/Terpylovs'kyi (1993), 170 and 168 fig. 1/3. For direct parallels, see Kovpanenko et al. (1978), 7, 48–49, and 54 fig. 28/16; Komar/Kubyshev/Orlov (2006), 309–10; 310 fig. 29.

63 Aksenov/Babenko (1998), 111–18; 112 fig. 1; 113 fig. 2; 114 fig. 3; 116 fig. 4. For high-status, inhumation burials in the forest-steppe belt, see also Synytsia (1999); Gavritukhin (2007); Volodarets'-Urbanovych (2009), 51 (table).

high-status burial.<sup>64</sup> Or they may have been from a hoard, as almost all silver artifacts known from the forest-steppe belt are not from burial or settlement, but from hoard assemblages.<sup>65</sup>

The hoards represent a unique phenomenon in the archaeology of Eastern Europe and have recently received a great deal of scholarly attention (Fig. 24). Ol'ga Shcheglova proposed that most hoards were family collections of valuables, while a few (such as that found in Velyki Budky) were (itinerant) jeweler's hoards.<sup>66</sup> Since several hoards contain pairs of non-identical fibulae, which are otherwise known from contemporaneous graves in the forest-steppe belt, as well as in the Crimea, some have advanced the idea that the hoards were the material culture correlate of local elites, who marked their social status and claims by means of a distinct female costume.<sup>67</sup> Vlasta Rodinkova went as far as to interpret the cluster of hoard finds in the lands between the Seym and Psel rivers (in Left-Bank Ukraine) as signaling a center of power, the "capital" of a polyethnic confederacy.<sup>68</sup> To others, however, hoards

indicate conspicuous consumption of a type known to anthropologists as *potlatch*. In times of social and political stress, such consumption may have served a number of functions, such as celebrating rites of passage or

64 Aksenov (2012), 32–33 and 35; 34 fig. 1/1–12. For older finds, see Avenarius (1896), 184–85; 181 fig. 53; Bobrinskii (1901), 148–49; Korzukhina (1996), 359 and 597 pl. 7/5–6.

65 Braychevs'kyi (1952), 161–65; pls. 1–IV; Prykhodniuk (1980), 129 and 131; 40 fig. 19/1; 99 fig. 61; Gavritukhin/Oblomskii (1996), 7 and 11–21; 194 fig. 19/4–14; 198 fig. 23/13, 14, 17, 18; 202 fig. 27/1–4; 203 fig. 28/1–6; 204 fig. 29/10–15; 205 fig. 30/6–22; 207 fig. 32/2; Korzukhina (1996), 359, 372–73, 397–405 and 418–20; 595 pls. 4–5; 596 pl. 6; 611 pl. 21; 612 pl. 22; 640 fig. 50/17; 651 pl. 61/7; 654 pl. 64; 656 pl. 66; 657 pl. 67/6–8; 658 pl. 68/1–9; 659 pl. 69; 660 pl. 70/6–11; 690 pl. 100/3, 4; 695 pl. 105; Prykhodniuk/Khardaev (1998), 260–65; 247 fig. 1; 251 fig. 2; 255 fig. 4; 257 fig. 5; 259 fig. 6; 270 pl. 1; 271 pl. 11; Goriunova/Rodinkova (1999), 172–75 and 217–18; 215 fig. 48/1, 2, 5, 6, 19–21; Prykhodniuk (2005), 54 and 171 fig. 66; Rodinkova/Saprykina/Sycheva (2018), 131; 132 fig. 1/1–16, 19–23, 25–49; 13 fig. 2/1–26; 134 fig. 3/17, 19, 26–41; 135 fig. 4/16, 37, 42–44. Moreover, some hoards also include early Byzantine silver plate, for which see Mango (1994); Rodinkova (2012). For rare settlement finds, see Khavliuk (1963), 336 and fig. 14/3; Prykhodniuk (1990), 88. As Skyba (2016), 90–92 notes, belt sets with fittings of the so-called "heraldic" style appear both in male burials in the steppe lands and in hoards of the forest-steppe region. In both cases they signal high status and were used only by the local elites.

66 Shcheglova (1999), 291; Shcheglova (2000), 137; Shcheglova (2006), 272–73; Szmoniewski (2008), 285–86. For the interpretation of (some) hoards in relation to (itinerant) craftsmen, see also Volodarets'-Urbanovych (2017).

67 Tolochko (1980), 248–49; Gavritukhin/Oblomskii (1996), 145; Curta (2001c), 218. For the concept of "female costume," see Rodinkova (2003); Rodinkova (2007); Rodinkova (2011); Zhilina (2019).

68 Rodinkova (2012), 196.

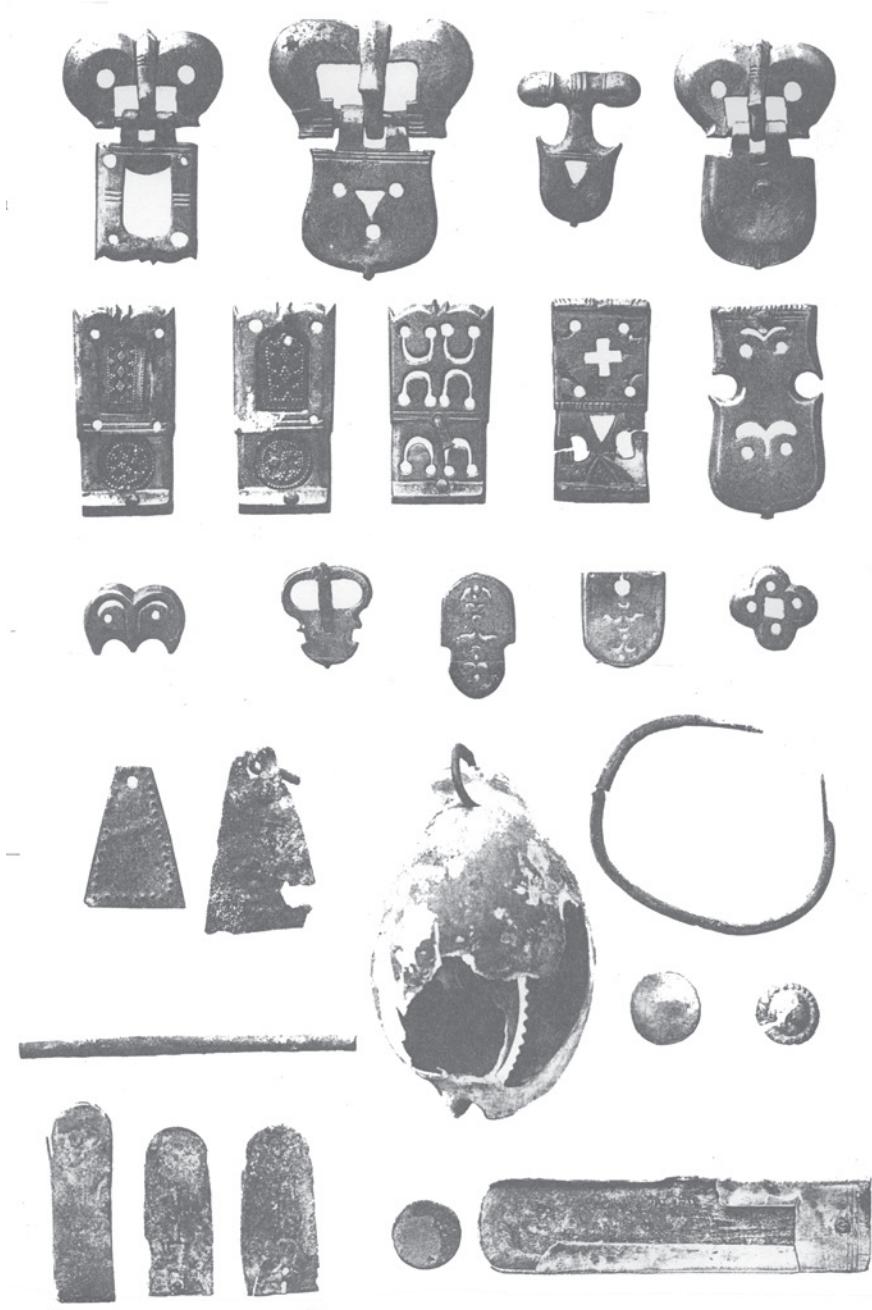


FIGURE 24 Khats'ky (Ukraine), selected artifacts from a hoard of silver and bronze: belt buckle and mounts, pendants (one made out of a cowrie), bracelet with flattened ends, bronze bar, appliques, and strap ends  
 SOURCE: BOBRINSKII (1901), PL. XIV



succession to office. It certainly was the privilege of an aristocratic group and probably involved provisions of food and of certain other valuables that did not survive in the archaeological record. Lavish offerings such as hoards of silver, involving the deposition in locations from which items could not be recovered, might have provided a way of fixing status and of claiming the prestige associated with it.<sup>69</sup>

The specific location in which some of those collections of valuables have been found, often near the water or in swampy areas, strongly suggests a votive deposition.<sup>70</sup> Such an interpretation has recently been accepted and adopted both by Ukrainian and by Russian archaeologists, primarily because of a new finds.<sup>71</sup> If the hoards may indeed be associated with competitive feasting and deliberate “destruction” of valuables, then the social group for which such strategies were important cannot have been a well-established elite with ascribed power over people and land. On the contrary, the potlatch is a response to social and political troubles; it is meant to obscure the fundamental weakness of the status claimed by competing members of the society. Far from being an entrenched aristocracy, the elites in the western parts of the forest-steppe belt struggled to maintain a modicum of authority over local communities, and to mark social distinctions in the material culture. That such claims were made primarily through the womenfolk strongly suggests that the stakes of the competition among men consisted of people, not land. The situation radically changed during the second half of the 7th century, when, together with the appearance in the forest-steppe belt of incredibly rich graves, all of men, a new type of hoard replaced the old collections. Conspicuously present in those “new” hoards are artifacts believed to be “masculine,” an indication of gender relations changing along with the political transformations brought by the demise of “Great Bulgaria” and the rise of the Khazar qaganate.<sup>72</sup>

A very different picture emerges from the examination of the archaeological record of the Middle Volga region, at the eastern end of the forest-steppe belt

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69 Curta (2001c), 222–23; Curta (2008a), 146. It is important to note that the selection of artifacts in some hoards seems to have been done with the idea in mind of illustrating the whole gamut of technological abilities expected from the early medieval metalworkers. See Shablavina (2002).

70 In some cases, artifacts were wrapped in cloth or even silk, another indication of conspicuous consumption. Rodinkova (2014), 393 notes that the trolological analysis of torcs found in some hoards indicates that they have been deformed or cut before deposition.

71 Derevianko/Volodarets'-Urbanovych (2017), 42; Rodinkova/Saprykina/Sycheva (2018), 131 and 139; Rodinkova (2018), 673.

72 Rodinkova (2011), 262.

in Eastern Europe. Most excavated cemeteries are either biritual or with inhumations (typically under barrows), although recent excavations have brought to light cremation cemeteries as well.<sup>73</sup> Unlike cremations, however, inhumations are typically well furnished. Most silver dress (earrings, bracelets, fibulae, belt fittings) and horse gear accessories (saddle mounts) have been found with inhumations.<sup>74</sup> There are even exceptionally rich, “princely” burials.<sup>75</sup> The most impressive assemblage consists of a great number of female dress accessories made of gold and was found in a burial chamber in 1936 in Ufa (Bashkortostan).<sup>76</sup> Much like in the western region of the forest-steppe belt, some of the high-status graves are of children.<sup>77</sup> At Vladimirovka on the Chagra river, a left-bank tributary of the Volga south of the Samara Bend, a 3- to 5-year old child was buried together with a fragment of a bridle bit and gold mounts with a fish-scale ornament that covered the saddle front bow, a detail most typical for “princely graves” of the late 4th and 5th century in Eastern Europe.<sup>78</sup> However, with the exception of the small collection of silver coins and dress accessories found in Karmaly, there are no hoards in the eastern

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- 73 Cremation cemeteries: Kazakov (1993), 103; Starostin/Chizhevskii (1993), 20–21; 21 fig. 1; 23 fig. 2; Viazov/Petrova (2013), 15–16; Viazov/Stashenkov (2013), 52. Biritual cemeteries: Gening (1976), 94 and 92 fig. 1; Kazakov (1998), 98 and 103; 13 fig. 1; 114 fig. 2. Inhumation cemeteries: Akhmerov (1951), 125 and 133; Mazhitov (1959), 114 and 115 fig. 1; Bogachev/Ermakov/Khokhlov (1996), 83 and 94 fig. 1; Bagautdinov/Bogachev/Zubov (1998), 10–11 and 43; 106 fig. 2; Skarbovenko/Stashenkov (2001), 8.
- 74 Earrings: Mazhitov (1959), 128, 134 and 136 pl. IV/7. Bracelets: Mazhitov (1959), 132. Fibulae: Akhmerov (1951), 133 and 132 fig. 39/7; Mazhitov (1968), 96 and 103; 127 pl. 8/12; 138 pl. 15/6; 140 pl. 19/6; Gening (1976), 103 and 101 fig. 8/15. For belt fittings, see Akhmerov (1951), 133; Mazhitov (1959), 126–129, 132, 133, 135, and 139; 121 pl. II/1–3, 5–10, 12; 136 pl. IV/5; 137 pl. V/6, 11–15; Mazhitov (1968), 108; 124 pl. 5/24–27, 30, 31; Gening (1976), 94, 100 and 103; 93 fig. 3/3–14; 100 fig. 7/8–16, 19–28; 102 fig. 9/3, 7–10, 22–25; Bogachev/Zubov (1993), 21–22, 27 and 29; 38 fig. 4/1–9, 17; 39 fig. 5/18–21, 22, 25; Bagautdinov/Bogachev/Zubov (1998), 37 and 202 fig. 107/7; Kazakov (1998), 107–108; 142 fig. 30/1–4, 8; Skarbovenko/Stashenkov (2001); Kruglov (2005), 109 fig. 10/1–15. Saddle mounts: Kazakov (1998), 108 and 142 fig. 30/8. Silver torcs, fibulae, belt fittings, and horse tack mounts have also been found in burial assemblages of the central parts of the forest-steppe belt, in the region of Tambov [Alikhova (1959), 129, 132, and 134–136; 118 pl. 50/9–11, 15; 120 pl. 51/5].
- 75 Akhmerov (1951), 132–34; 127 fig. 39/6; Mazhitov (1959), 132–33; 121 pl. II/7, 8, 12, 14, 15. Two glass chalices with fluted ornament, probably of Byzantine origin, are known from burial assemblages discovered in Kominternovo 2 and Birsk; see Kazakov (2005).
- 76 Akhmerov (1951), 126–31; 127 fig. 36; 129 fig. 37; 130 fig. 38; 132 fig. 39.
- 77 There are also examples of isolated, rich burials: Rashev (2000), 23 and 136 fig. 30; Kruglov (2005), 109 fig. 10.
- 78 Skarbovenko (1979), 165–68; 165 fig. 1; 166 fig. 2; 168 fig. 3. It is important to note that, like male burials in the steppe belt, the child in Vladimirovka was buried into a prehistoric (Bronze-Age) mound. For analogies for the golden mounts of the saddle, see Zaseckaia (1994), 46–50.

parts similar to those of the western parts of the forest-steppe belt. When combined with the evidence of fortified settlements and of silos, the archaeological record from the Middle Volga region, particularly from cemeteries and isolated burials, strongly suggests that the local society was stratified. Local elites were more entrenched than in the western parts, and probably enjoyed economic privileges as well. Whether they also owned land remains unclear in the absence of any contextual information from the written sources. They most likely controlled people and labor, as indicated by the organization of ironworking. When connected to the trade routes coming from Central Asia, those elites may have even pushed into the forest belt to the north to tap the local sources of fur.

## Subsisting without Social Hierarchy in the Forest Belt

For no other region of Eastern Europe have climate and environment caught the attention of historians more than for the forest zone. Some believe that the temperate hardwood forest covering northern Ukraine and southern Belarus represented “great obstacles to settlement” and can explain why “the tribes in the southern part of the forest belt” established contact with the steppe tribes only “in a sluggish manner.”<sup>1</sup> Some claim that the early medieval settlement in the so-called “Sarmatic mixed forest” region of northern Belarus and north-western Russia was made possible by a drier climate, while others believe it was wetter, but colder.<sup>2</sup> In both cases, environmental determinism serves as explanation for cultural changes attributed to movements of population. Even without environmental determinism, some maintained that the cultivation of crops was introduced during the 6th or 7th century to the northern parts of the forest belt through migration from the outside.<sup>3</sup> Others have noted that querns, for example, are present on sites that either have nothing to do with the culture of the presumed immigrants, or are otherwise earlier than the date advanced for the migration.<sup>4</sup> In addition, strongholds in the Valdai Heights near Smolensk (Russia) produced evidence of wheat and barley seeds.<sup>5</sup> Wheat seeds also appear on contemporary, open settlements in the Novgorod region, while millet predominates on those on the southern border of the forest

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1 Avdusin (1989), 135–36.

2 Furas'ev (2003), 219; Oleinikov (2007), 166 and 168.

3 Minasian (1982), 28. However, Sedov (1995), 215 believed that deprived of the tools of advanced agriculture with which they had been familiar from their homeland, the immigrants adopted the primitive slash-and-burn techniques of the local population. See also Koneckii (1998), 234 and Koneckii (2000), 242 and 244.

4 Nosov (1988), 24. For querns from strongholds in the Smolensk region, see Tret'iakov (1958), 171–73 and 182 fig. 10/2. For querns from strongholds in central Belarus, see Shadyra (2016), 248 and 247 fig. 29/9.

5 Shmidt (1989), 72; Shmidt/Modestov (2003), 99. See also Dolukhanov/Nosov (1985), 21. Common wheat and two-rowed barley have also been found on the earliest (5th- to 6th-century) occupation phase at Pskov; see Tuganaev/Tuganaev (2007), 39. According to Sedin (1997), 282, at Nikadzimava, in eastern Belarus, the predominant cereal is barley.

region.<sup>6</sup> Querns have also been found in the southern, central, as well as northern parts of the forest belt.<sup>7</sup> However, there are many more sickle and scythe finds in the northern than in the southern region.<sup>8</sup> Conversely, almost all clay pans known so far are from the south, with only a few finds from the central region.<sup>9</sup> Whether clay pans were associated with the cultivation of millet, or the consumption of flat bread was culturally foreign to the northern region of the forest belt, there is no reason to exclude that region from the picture of the 6th- to 7th-century agriculture of Eastern Europe. The only plowshare has also been found in the south, on the settlement site at Bakota (Fig. 25). This was a slightly asymmetrical specimen of Henning's type A<sub>1</sub>.<sup>10</sup> However, the context of its discovery suggests a later date, perhaps shortly before or after 700.

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- 6 Shitov et al. (2007), 56; Gorbanenko/Pashkevich (2010), 155; Gorbanenko (2017), 463 and 465. Millet and lentils also appear on open settlements in Belarus, for which see Makushnykau (2014), 373. That wheat predominates in the north and millet in the south is a strong argument against the idea that the cultivation of cereals in the northern parts of the forest belt is the result of a migration from the south.
- 7 Mitrofanov (1966), 228; Rusanova (1973), 33; Baran (1972), 147; Prykhodniuk (1975), 88; Nosov/Plokhov (2016), 352–53; 384 fig. 15B.1.
- 8 Sickles: Tret'akov (1958), 173 and 182 fig. 10/1; Isaenko/Mitrofanov/Shtykhov (1970), 196 fig. 71/8–11; Minasian (1972), 19; Pobol' (1974), 378; Baran/Pachkova (1975), 87; Mitrofanov (1978), 87 and 88; 132 fig. 39/3, 4; 146 fig. 54/2; Vakulenko/Prykhodniuk (1984), 85; Zverugo (2005), 101 and 117 fig. 64/5; Shmidt (2008), 19 and 156 pl. 13/3, 9; Sinicyna/Islanova (2009), 491 and 493 fig. 14/4; Ereemeev/Dziuba (2010), 113 and 112 fig. 104/5; Islanova (2012), 42; Islanova (2013), 201 and 202 fig. 2/11; Islanova (2016), 193 fig. 32/8, 10; 196 fig. 35/4, 5; 202 fig. 41/3; 218 fig. 58/3; Kolosovskii (2016), 6; Liashkevich/Kasiuk (2016), 218 and fig. 27/1, 2, 7; Nosov/Plokhov (2016), pp. 352 and 386 fig. 17/12, 13. See also Shmidt/Modestov (2003), 72–74; Medvedev (2011), 228 and 259 fig. 4.14.3–6. For scythes, see Gurevich (1962), 61 and 62 fig. 49/9; Symonovich (1963), 132 fig. 26/14; Aulikh (1972), 41 pl. VIII/43; Padin (1974), 136 and 134 fig. 2/5; Mitrofanov (1978), 93 and 142 fig. 50/44; Zverugo (2005), 100–02 and 117 fig. 64/2, 3. Other finds of sickles and scythes, such as those from Nikadzimava are presumably of a late 7th- or 8th-century date. See Sedin (1995), 165 fig. 1/4, 5; Sedin (2000), 33 fig. 1/5. For a rare find of a mattock, see Aulikh (1972), 41 pl. VIII/42.
- 9 Smirnova (1960), 231 and 237–38; 233 fig. 14/1, 2, 8; 234 fig. 15/7; 235 fig. 16/2; 236 fig. 17/2; Symonovich (1963), 123 and 114 fig. 15/4; Symonovich (1969), 88; Baran (1972), 150–53 and 181; 152 fig. 37/11, 12; 154 fig. 38/4, 7; 182 fig. 58/12; Goriunov (1972), 46; 44 fig. 14/8, 9, 19; Padin (1974), 136; Prykhodniuk (1975), 83–84, 102, 106 and 107; 34 fig. 15/9; 130 pl. XX/5; 132 pl. XXII/20–23; 133 pl. XXIII/7; 137 pl. XXVII/15; 138 pl. XXVIII/7, 8; 139 pl. XXIX/9; 140 pl. XXX/13; Baran/Pachkova (1975), 89 and 91; 90 fig. 4/10, 11; Vynokur (1980), 870; 870 fig. 3/6; 871 fig. 4/6; Kozak (1984), 91–92; 92 fig. 3/8, 9; Vakulenko/Prykhodniuk (1984), 75, 82, and 84; 46 fig. 21/26, 27; 58 fig. 33/14; 62 fig. 35/15, 16; Makushnykau (1994), 227 and 232 fig. 3/6; Vynokur/Gorishnii (1994), 139 fig. 68/12–13; 141 fig. 70.
- 10 Vynokur/Gorishnii (1994), 66 and 139 fig. 68/4. Another plowshare of the same type is known from Mikol'cy (near Myadziel, Belarus), and may also be of a later date; see Zverugo (2005), 102 and 117 fig. 64/6. For plowshares of type A<sub>1</sub>, see Henning (1987), 49–50, who notes that they were in use since the Iron Age.



FIGURE 25 Principal sites mentioned in the text and in the notes

It is not easy, or even possible for any region of the forest belt to distinguish between rotational slash-and-burning and permanent field cultivation. In the absence of more advanced paleobotanical studies, particularly of field weeds, the use of field rotation in the southern region remains elusive.<sup>11</sup> On the other

11 According to Kozlovskaja (1970), 16–21, the archaeological excavations carried out in the 1920s at Bancerovshchina (near Zhdanovichi, Belarus) produced evidence of common vetch, bedstraw, knotgrass, field mustard, clover, and corn spurry, none of which was an agricultural weed in the early Middle Ages. According to Eremeev/Dziuba (2010), 355, pollen samples from the bog near Goriane (near Velizh, Smolensk region) indicate the presence of cornflower, which is typically associated with cultivated fields. It is not at all clear whether the cultivation in question was by slash-and-burning. Shmidt (1972), 66–68

hand, if the slash-and-burn technique was practiced in the north, it definitely did not create an open landscape. Either way, there is clear evidence of livestock grazing alongside cereal cultivation. Cattle, sheep, and pig bones have been found on some sites in the south, while in the north horse bones predominate in burial assemblages.<sup>12</sup> Bones of wild animals (bear, deer, fox) are prominent in faunal assemblages, an indication that hunting played a key role in the subsistence economy of communities in the central and northern parts of the forest belt.<sup>13</sup>

Animal bones have been found on almost every settlement site in the forest belt. However, without detailed zooarchaeological studies, particularly of the age at which the animals were slaughtered, it is not possible to establish the economic role of livestock. In other words, it is impossible to decide whether cattle and sheep were kept for meat, dairy, or some other economic reason.<sup>14</sup> Deer antler was used in the south for manufacturing simple tools, such as awls, the production of which was household based, as indicated by half-manufactured products found on several settlement sites.<sup>15</sup> No traces of bone or antler working have so far been found in the central and northern parts of the forest belt. The preeminent industrial activity on sites in Belarus was non-ferrous metallurgy, as indicated by crucibles.<sup>16</sup> Such implements, however, have also been found farther to the north and to the northeast, in the Novgorod and Tver regions of present-day Russia.<sup>17</sup> The same is true for finds

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nonetheless believes that the fireweed pollen identified at Akatovo (near Smolensk, Russia) is an indication of slash-and-burn practices. Makushnykau (2009), 20 is convinced that slash-and-burning was the main form of agriculture practiced in (south)eastern Belarus between the 5th and the 7th centuries.

- 12 Baran/Pachkova (1975), 88–89; Islanova (1989), 30; Sedin (1994), 121–22; Terpylovs'kyi/Shekun (1996), 36; Allmaë/Aun/Maldre (2007), 304; Aun/Allmaë/Maldre (2008), 276–77.
- 13 Mesnianskina (1999), 183; Shmidt/Modestov (2003), 106–07.
- 14 The shears found in Bakota and Nikadzimava suggest that wool was an important reason for sheep breeding. See Vynokur/Gorishnii (1994), 139 fig. 68/11; Sedin (1994), 123.
- 15 Vakulenko/Prykhodniuk (1984), 75–76 and 80–81; 68 fig. 38/35. (Domestic) animal bones were also the raw material for household tools, as indicated by half-manufactured products, such as found in Bakota; see Prykhodniuk (1975), 84–85; 34 (fig. 15/7). A few combs, such as found in Kavetchina (near Kam'ianets' Podil's'kyi, Ukraine) were also made of bone, not antler; Vakulenko/Prykhodniuk (1984), 81, 83 and 66 (fig. 38/13, 29).
- 16 Mitrofanov (1978), 93 and 142 fig. 50/2, 46; Zverugo, (2005), 109 and 131 fig. 78/2–9, 12; Drobusheskii (2006), 21 and 32 fig. 10/17, 18. Some crucibles have been found in the filling of settlement features, an indication that casting was taking place somewhere in the vicinity.
- 17 Pobol' (1974), 378; Zaiac (1980), 362; Islanova (1997), 35 and 212 fig. 73/12, 18, 19, 30; 221 fig. 82/9, 13; Viargei (2005), 491 fig. 2/19; Sinicyna/Islanova (2009), 491 and 492 fig. 13/10; Nosov/Plokhov (2016), 352 and 386 fig. 17/8, 10, 11.

of ladles, almost all of which were found on sites in northwestern Russia.<sup>18</sup> Other finds from the same sites indicate that the preferred technique was casting in one-piece moulds.<sup>19</sup> In the southern region of the forest belt, such moulds have only been found on fortified sites interpreted as industrial and religious centers (see below).<sup>20</sup> The coincidence in time and apparent similarity between moulds from the northern parts of the forest belt and those found in the forest-steppe belt in present-day Ukraine, as well as in the Lower Danube region has been taken, much like the cultivation of crops, as a sign of a migration from the southern regions of Eastern Europe.<sup>21</sup> However, the ornaments made with the moulds found in the Valdai Heights have no parallels anywhere else in Eastern Europe, especially not in the Middle Dnieper region from which the immigrants are said to have come.<sup>22</sup> Moreover, none of the moulds found in the forest belt can be associated with lost wax casting, and all were employed for alloys with a large quantity of lead.<sup>23</sup> Lead ingots have actually been found in the stronghold excavated at Nikadzimava (near Horki, in eastern Belarus), together with a great number of small ornaments

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- 18 Islanova (1997), 32–33 and 36; 208 fig. 69/16; 213 fig. 74/13; 222 fig. 83/10–12; Islanova/Mireckii/Oleinikov (2007), 137 and 136 fig. 4/6; Shmidt (2008), 26 and 170 pl. 27/6; Sinicyna/Islanova (2009), 492 fig. 13/9; Ereemeev/Dziuba (2010), 98 fig. 93/2. In northwestern Russia, ladles were occasionally deposited in graves: Chernykh/Malygin/Tomashevich (1998), 405–06; 401 fig. 7/2. For ladle finds from Belarus, see Mitrofanov (1967), pp. 255 and 252 fig. 2/10; Mitrofanov (1978), 142 fig. 50/7 and 144 fig. 52/33; Zverugo (2005), 109 and 131/10, 11, 13, 14, 16; Medvedev (2011), 230; Shadyra (2016), 243 fig. 26/9. The only 6th- to 7th-century ladle known so far from the forest region of Ukraine is that found in Zymne, for which see Aulikh (1962), 105 fig. 2/1, 2; Aulikh (1972), 75 pl. XIV/1–3.
- 19 Islanova (1997), 22 and 222 fig. 83/16–9; Islanova/Mireckii (1997), 14 and 15 fig. 2/1–3; Sinicyna/Islanova (2009), 491 and 492 fig. 13/1, 2; Islanova (2013), 203 and 202 fig. 2/2; Nosov/Plokhov (2016), 352 and 386 fig. 17/5. In the north, moulds and ladles were occasionally deposited in graves: Schmiedhelm/Laul (1970), 160 and fig. 4; Sedov (1974), 48; pl. 23/1, 4; pl. 27/9. For mould finds from southern Belarus, see Kasiuk (2016), 52 and 53 fig. 14/16.
- 20 Aulikh (1972), 75 pl. XIV/5 and 76 pl. XV/1–7; Fylypchuk (2010), 142–43; 163 pl. 6/1, 2; 164 pl. 7/1, 2; 165 pl. 8/1, 2.
- 21 Shcheglova (2001), 53.
- 22 Shcheglova (2001), 50–51. For types of ornaments made of lead alloys and produced with moulds found in the north, see Mikhailova (2015c), 126 and 128–29; 127 fig. 1. There are many more similarities with moulds found in later assemblages dated to the 8th century: Shcheglova (2009), 57; Volodarets'-Urbanovych (2017), 334, 336, and 337 fig. 3; Volodarets'-Urbanovych (2018), 107 and 108 fig. 2. On the basis of formal analogies, the mould found at Staraiia Ladoga in horizon E2 (dated to 840–860) is believed to be of an earlier, perhaps 7th-century date; see Iushkova (2006), 147. If so, it is the northernmost mould discovered in the forest belt, at the border with the taiga.
- 23 Minasian (2003), 210–11.



made of lead alloy.<sup>24</sup> There is also evidence that metalworkers in the southern parts of the forest belt employed scrap metal for copper alloys.<sup>25</sup> On the other hand, sites in the forest belt have produced artifacts, for the local production of which there is no evidence. For example, the origin of bronze bracelets with trumpet-shaped ends, such as found especially in burial assemblages, remains obscure, as such artifacts were cast in two-piece moulds, and no such implements have so far been found in the region.<sup>26</sup> Similarly, although ornaments made of bronze sheet with pressed decoration are known from several burial assemblages in the northern part of the forest belt, no pressing dies have been found in the region.<sup>27</sup>

Nor can the remains of ironworking be linked to any large-scale production. Iron implements (sickles, scythes, and knives) and dress accessories (pins and buckles) are relatively rare on sites in the forest belt. Slag often appears in the filling of settlement features, both in the southern and the northern regions of the forest belt.<sup>28</sup> In the south, slag was commonly found on, or next to the fireplace, an indication that ironworking may have taken place inside the sunken-floored house.<sup>29</sup> An ironworking center with five furnaces was excavated in the 1990s in Sniadzin (near Petrykau, in southern Belarus). Slag and fragments of bog iron found in four furnaces and several of the neighboring pits bespeak the smelting activities taking place on the site.<sup>30</sup> All furnaces were dug into the ground and were of small size. This was primarily a consequence of using bog

24 Sedin (2000), 39–41 and 40 fig. 5/1, 2, 21–25. The origin of the lead ingots remains unclear: were they produced on site, or brought from somewhere else?

25 Aulikh (1972), 75 pl. xiv/4; Mitrofanov (1978), 144 fig. 52/20; Vakulenko/Prykhodniuk (1984), 76 and 68 fig. 38/30. Neither the pierced antoninianus struck for Hadrian and found Kavetchina, nor the bronze coin from Zymne, an imitation of a copper coin struck for Justinian, may be regarded as scrap metal. See Vakulenko/Prykhodniuk (1984), 81; Aulikh (1972), 19.

26 Padin (1960), 317 and 318 fig. 2/5; Stankevich (1962), 32 and fig. 11/8; Goriunov (1981), 96 and 43 fig. 14/10; Kochkurkina (1981), 19–20 and 127 pl. 3/3, 7; Islanova (1997), 51 and 223 fig. 84/3. There is nothing about production in Mikhailova (2014a) and Mikhailova (2015b). For other finds, see Padin (1960), 134; Akhmedov et al. (2007), 131 fig. 23; Mikhailova/Fedorov (2011), 71–72 and 74 fig. 2/1. For other artifacts obtained by means of casting in two-piece moulds, see Sedov (1974), 59; Sukhobokov (1975), 39 and 30 fig. 7/3; Mikhailova (2014c), 283.

27 Mikhailova (2007) and Mikhailova (2012).

28 Symonovich (1963), 122; Mitrofanov (1978), 93. In the north, slag was also occasionally deposited in graves: Furas'ev (2001), 100. For other finds of slag, see Baran (1972), 193; Mitrofanov (1978), 91; Furas'ev (1992), 27; Ereemeev/Dziuba (2010), 326 and 355; Nosov/Plokhov (2016), 353.

29 Prykhodniuk (1975), 83; Vakulenko/Prykhodniuk (1984), 79.

30 Viargei (2004), 34–39; Viargei (2016), 19–20 and pls. 23–24.

iron as the main source of ore. Bog iron is rich in phosphorus, which posed an important technological problem: the key condition of the blooming process is the ability to maintain a temperature exceeding 1000 centigrades throughout the entire working space of the furnace. This was often accomplished by building furnaces of modest size and by digging the lower part of the furnace into the soil. With the relatively small carburized cores of the blooms obtained by such means, early medieval smiths in the forest belt had only a few technological options available. The metallurgical study of several tools and implements (sickles, scythes, and knives) has revealed that few, if any artifacts made of bog iron were hardened or tempered.<sup>31</sup> Multi-layered welding was the preferred method, whereby one of the layers, usually the edge, had a ferritic structure, while the others had a ferritic-pearlitic character.<sup>32</sup> This is particularly true for the relatively numerous tools, commonly interpreted as burins, which have been found on several sites in the forest belt.<sup>33</sup>

The pottery found on 6th- to 7th-century sites in the forest belt is mostly handmade, but wheel-made pottery has also been found on several sites in Ukraine—both open settlements and strongholds.<sup>34</sup> However, it remains unclear where that pottery was produced. Good-quality wheel-made

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- 31 Rozanova/Terekhova (1997), 130 and 132. Although heat treating was well known to smiths in other parts of Eastern Europe, it was conspicuously absent in the forest belt of north-western Russia and Belarus. All hardened and tempered artifacts found in those regions were most likely manufactured outside it.
- 32 Piaskowski (1974), 83; Rozanova/Terekhova (1997), 132. A ferritic structure is rich in iron, while pearlite is a structure alternating layers of ferrite and cementite (a compound of iron and carbon).
- 33 Timoshchuk/Prykhodniuk (1969), 72 and 74 fig. 3/2; Aulikh (1972), 41 pl. VIII/19–28; Sedov (1974), 53 and 59; pl. 27/10, 13; Mitrofanov (1978), 93; 142 fig. 50/1, 14, 15, 48, 49; 146 pl. 54/3, 5, 8, 10; Vakulenko/Prykhodniuk (1984), 66 fig. 38/8; Nosov (1984), 15 and 14 fig. 4/10; Islanova (1997), 216 fig. 77/16; 218 fig. 79/3–7; Chernykh/Malygin/Tomashevich (1998), 403–404 and 402 fig. 8/3. Since no engraved metal artifacts are known from the forest belt in northwestern Russia and northern Belarus, it is likely that, if they were burins, those tools were used for carving wood.
- 34 Tikhanova (1971), 10; Baran (1972), 174, 180 and 182; 176 fig. 53/4; 179 fig. 56/14; 182 fig. 58/14; Prykhodniuk (1975), 107–08; 35 fig. 16/2, 3, 5–12; Vynokur (1980), 870 and fig. 3/1, 5, 8, 9, 12; 871 fig. 4/1–4; 872 fig. 5A/4–6; Kozak (1984), 90 and fig. 1/6, 7; Vakulenko/Prykhodniuk (1984), 62, 76, 78–79, 81–82, and 86; 52 fig. 27/9; 56 fig. 31/11; 64 fig. 37/1, 2, 4–8, 13, 14, 23; Gavritukhin (1998), 177. The fragments found in a sunken-floored house at Bakota and in two refuse pits from Bovshiv (near Halych, Ukraine) and Nezvys'ko (near Ivano-Frankivsk, Ukraine), respectively, are from pots thrown on a tournette (slowly moving, hand-activated wheel), and may therefore be of a late 7th-century date: Prykhodniuk (1975), 132 pl. XXII/17; Baran (1972), 154 fig. 38/1; Smirnova (1960), 236 fig. 17/5, 7. The same applies to the ceramic remains from Plisnes'k, some of which were found in the earthen rampart: Fylypchuk (2010), 140 and 142–43; 168 pl. 11/6–8.

pottery was still produced in northwestern Podolia (the present-day region of Khmel'nytskyi, Ukraine) in the 5th century.<sup>35</sup> However, no kiln has so far been found in the entire forest belt region of Eastern Europe, which could be dated, with any degree of certainty, to the 6th or to the 7th century. The wheel-made pottery found in eastern Galicia, northwestern Podolia, and southern Volhynia (all in western Ukraine) came from the south, especially since, upon close examination, some fragments turn out to be from Roman amphorae.<sup>36</sup> Nothing is known about the nature of exchanges that made it possible for Roman pottery to reach that far to the north.<sup>37</sup>

Western Ukraine is also the region in which four remarkable hoards have been found that point to political ties to the Roman Empire. Besides bracelets, torcs, earrings, and other dress accessories, three of those hoards include silver plate, some of it with quality stamps from Constantinople.<sup>38</sup> Moreover, two Sassanian lobed dishes with ibex flanking trees, as well as fragments of two Sassanian silver drinking vessels in the shape of antelope heads, all found in the fourth hoard may have also come from the Empire. After all, the Sassanian silverware found in the contemporary hoard from Zemiansky Vrbovok (near Krupina, Slovakia) was associated with freshly minted Byzantine miliaresia and hexagrams struck for Emperor Constans II.<sup>39</sup> Both the Byzantine and the Sassanian silver plate in those collections may have reached the forest belt region of Eastern Europe as gifts or bribes from the Empire for some chieftains in the area, a conclusion substantiated by the presence of torcs, a symbol of political authority which appears in contemporary or slightly earlier

35 Baran (2008). In some cases (e.g., at Kavetchina), the possibility of fragments of wheel-made pottery being from earlier phases of occupation on the same sites can be safely excluded, as those fragments have been found in the filling of the settlement features dated to the 6th or 7th century.

36 Tikhanova (1971), 10; Vakulenko/Prykhodniuk (1984), 62, 77, 80, and 84; 61 fig. 34/10; 64 fig. 37/10, 11, 15, 40. Sites on which fragments of amphorae have been found are located not too far from the right bank of the Upper Dniester river, within a short distance from sites in northeastern Romania and in Moldova that have also produced evidence of Roman materials.

37 Zymne (near Novovolynsk, not far from the Ukrainian-Polish border) is so far the northernmost site in East Central Europe on which there is evidence of wheel-made pottery during the 6th and 7th centuries; see Gavritukhin (1998), 177.

38 Zalissia (near Ternopil): Ugrin (1987). The fragment of a sheet fibula of so-called Dnieper type suggests a date in the late 7th century. Krylos (near Halych): Kropotkin (1971). For the bowl, see Kropotkin (1970). Velyki Kuchuriv (near Chernivtsi): Noll (1974). For the situla with mythological scenes, see Gschwantler (1993).

39 Bienkowski (1929); Trever/Lukonin (1987), 117 and 122; pls. 99–100. For Zemiansky Vrbovok, see Svoboda (1953). For the coins, see Radoměřský (1953); Fiala (1986).

assemblages associated with elites.<sup>40</sup> Much like in the forest-steppe zone (see chapter 12), hoards seem to have served as a potlatch-like display (and “destruction”) of valuables.

The silver known so far from the northern parts of the forest belt was found primarily in hoards, only occasionally in burial assemblages.<sup>41</sup> However, unlike the forest-steppe zone, with one possible exception, there are no richly furnished inhumations.<sup>42</sup> All 6th- to 7th-century cemeteries known so far from the forest zone have only cremations, some in pits, others in urns.<sup>43</sup> The only conspicuous difference is that between “flat” cemeteries and graveyards with barrows. The latter are particularly prominent in the northern parts of the forest belt, although some cemeteries with burial mounds are also known from the central parts as well.<sup>44</sup> Most burials have few, if any grave goods. With some notable exceptions, social status does not seem to have been marked at all in burial assemblages.<sup>45</sup> To be sure, the barrows of the northern parts of the forest belt (particularly southeastern Estonia, the upper courses of the rivers Velikaia, Western Dvina and Lovat’, and the lands between the rivers Msta and Mologa)

40 Kazanski (2011).

41 For hoards, see Kolosovskii (2016), 6 and 7 fig. 2; Prykhodniuk/Padin/Tikhonov (1996); Shcheglova (2010), 154 and pl. 3. For burials, see Sedov (1974), 58; pl. 23/18, 19; pl. 28/11; Lebedev (1977), 42 and 44; 43 fig. 2/14, 15, 20; Pronin (1988), 172.

42 For the exception, see Vinogradskii/Lav’iuk (1959), 98 and 96 fig. 2.

43 Padin (1960), 317–18; Padin (1974), 132 and 134; Minasian (1979), 176–79; Nosov (1984), 11–15; Islanova (1997), 50–53; Chernykh/Malyghin/Tomashevich (1998), 403–06; Furas’ev (2001), 94–100; Mikhailova (2016), 187 and 196.

44 Sedov (1974); Musianowicz (1975); Sukhobokov (1975), 39; Lebedev (1977), 38, 40, 42, and 44; Plavinskii (2013), 67–68.

45 The most notable exception is the warrior grave under a barrow excavated in Zaruch’e (near Luga, Russia), with a shield boss, a lance head, and a bridle bit; see Kazanski (2014). As Kazanski (2010c), 80–83 notes, the closest analogies for the shield boss are from Lithuania. Two fragmentary, early Byzantine helmets, which have been discovered by metal detector at one or two undisclosed location(s) in the region of Briansk (Russia), may also point to an elite burial; see Radiush (2014), 42–43; 50 fig. 4; 51 fig. 5. A third helmet was found under similar circumstances about 90 miles farther to the south, near Khomutovka (Kursk region); see Radiush (2012). A spearhead was deposited in Stan (near Udombia, Russia) together with the cremated remains of two individuals: Islanova (1997), 52 and 222 fig. 84/2. Many more weapons, however, have been found in settlement than in burial assemblages: Symonovich (1963), 115 and 131 fig. 25/1; Aulikh (1972), 48 pl. 1X/1–7, 9–19; 52 pl. X/1–7, 9–35; Pobol’ (1972), 130 and 142 fig. 17/1; Padin (1974), 136 and 134 fig. 2/6; Vakulenko/Prykhodniuk (1984), 82 and 68 fig. 39/9; Makushnykau (1990), 59 and 58 fig. 2/17, 18; Gurin (1994), 156; Viargei (1997), 36 and 33 fig. 1/6, 7; Viargei/Tremer (2003), 151 and 187 fig. 28/23; Zverugo/Medvedev (2006), 33 and 51 fig. 11/4–6; Fylypchuk (2010), 142 and 161 pl. 3/1–3; Marzaliuk (2011), 105 and fig. 10/2. See also Shmidt (1995); Kazanski (2007); Panikars’kyi (2014).

are impressive structures, some of them over 100 m long, which implies a great deal of collective effort and labor organization.<sup>46</sup> However, the size of those burial mounds was not meant to represent the elevated status of any particular individual. Many so-called “long barrows” have multiple burials, and detailed stratigraphic observations revealed that the elongated mounds have been created through the extension of initially rectangular or oval mounds of smaller size.<sup>47</sup> This suggests that instead of monuments for prominent individuals, the “long barrows” were collective, perhaps family burials. Given how rare conspicuous displays of social identity are at an individual level, Elena Mikhailova has even advanced the idea that the long barrows were the expression of a religious confederacy (a cultic union).<sup>48</sup> Whatever the interpretation of the archaeological record of northwestern Russia dated to the 6th and 7th centuries, there are indeed very few, if any indications of local elites. Communities that buried their dead under the long barrows may not have been egalitarian, but they most likely functioned without developed social hierarchies. Much like in the forest-steppe zone (see chapter 12), the hoards of silver in the southern parts of the forest belt are not an indication of an entrenched aristocracy, but of a continuous struggle of the emerging local elites to establish authority with the assistance of recognition from the Empire. Just as in the Middle Dnieper region, there are no hillforts in western Ukraine during the 6th and 7th centuries. However, several hillforts are known from the central and northern parts of the forest belt.<sup>49</sup> Could they be interpreted as an indication of well-established aristocracies, as in the Middle Volga region (see chapter 12)? Some Soviet archaeologists believed that the strongholds of northwestern Russia and Belarus were refuges.<sup>50</sup> It is difficult to imagine the kind of threat over the entire forest belt that would make it necessary to build refuges, almost

46 Tvauri (2007), 1. The earliest long barrows are dated to the second half of the 5th century or the early 6th century and have been found in the region of the Upper Daugava and the Upper Msta, as well as in the hinterland of the lakes Peipus and Pihkva (Pskov)—the borderlands of modern Russia with (2003), 250; Mikhailova (2018), 106.

47 Aun (2005); Mikhailova (2018), 108–09.

48 Mikhailova (2018), 114.

49 Tret'iakov (1958), 171–73; 171 fig. 1; 172 fig. 2; 173 fig. 3; 180 fig. 8; Symonovich (1963), 97, 101, 103, 105, 107–108, 110–112, 114–117; 98 figs. 1–2; 99 fig. 3; 100 fig. 4; 101 fig. 5; 102 fig. 6; 104 fig. 8; 106 fig. 10; 107 fig. 10; 109 fig. 11; 113 fig. 12; Mitrofanov (1967), 243–44, 256–260; 245 fig. 1; Aulikh (1972), 4–20; 5 fig. 1; 12 fig. 2; 13 fig. 3; 16 fig. 4; 39 fig. 5; Mitrofanov (1977); Goriunov (1981), 95; Sedin (1995), 159–64; 161 fig. 1; 162 fig. 2; 163 fig. 3; Islanova/Mireckii (1997), 12, 14, and 18; Fyl'pychuk (2010), 135–36, 138, 140, 142–43, 144; 49 fig. 1; 150 fig. 2; Marzaliuk (2011), 97, 105, 107 and 113; 98 fig. 1. See also Levko (2003); Lopatin (2018).

50 Aulikh (1969). This interpretation was also adopted by some Polish archaeologists, e.g., Kobyliński (1990), 155.

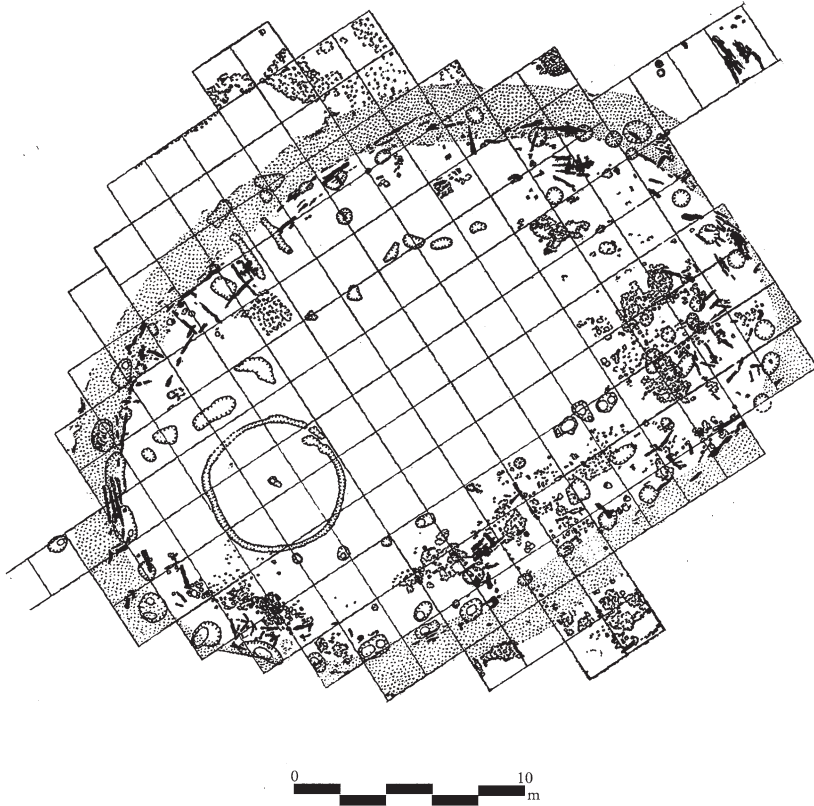


FIGURE 26 Tushemlia (Russia), plan of the stronghold, with the circular ditch inside  
SOURCE: TRET'IAKOV (1958), 173 FIG. 3

at the same time, at locations so far from each other as Osechen (near Torzhok, Russia) and Zymne. Moreover, at Zymne, the occupation of the stronghold seems to coincide in time with the occupation on at least one of the open settlements in its hinterland, which makes the case of refuge quite weak.<sup>51</sup> As an alternative, Petr Tret'iakov advanced the idea of cultic centers on the basis of a loose interpretation of a circular ditch inside the stronghold at Tushemlia (near Pochinok, in Russia) as delineating a sanctuary (Fig. 26).<sup>52</sup> However, the dating of those postholes is problematic, and it is not at all clear that they all date to the early Middle Ages or, for that matter, at the same time at all. Marek Dulinicz thought that, like Hački and Szeligi in Poland (see chapter 10),

51 Timoshchuk (1995), 23–26; Gavritukhin (1998), 185–86.

52 Tret'iakov/Shmidt (1963), 18 and 17 fig. 6 (for the ditch, see also fig. 13 before p. 45). The idea was then applied to other strongholds; see Rasadzin (1985).

strongholds in the northern parts of the forest belt were regional industrial centers, sites on which exotic, foreign goods were on display, and in which the cremated remains of ancestors and family members were brought and scattered. In short, those were “places, which brought power,”<sup>53</sup> However, the bulk of evidence for 6th- and 7th-century smelting and metalworking in the forest belt of Eastern Europe comes from open settlements, not from strongholds. Cremated human remains have indeed been found inside the strongholds excavated at Plisnes’k and Nikadzimava.<sup>54</sup> It is not clear that the remains can securely be dated to the early Middle Ages. Nor have such remains been found at other sites. The archaeological excavations carried out at Banceroovshchina brought to light ten stone platforms, which were interpreted as buildings. It is not clear, however, whether those structures belong to the 5th- to 7th-century occupation of the site, or to the earlier, Iron-Age phase.<sup>55</sup> At Nikadzimava, an above-ground structure has been found on the highest elevation of the site. Inside the building, which had a hearth, archaeologists found a large quantity of charred seeds, mostly of cereals.<sup>56</sup> Two sunken-floored buildings have been excavated at Kolochin (near Rechyca, Belarus), but nothing out of the ordinary was found in any of them.<sup>57</sup> There were no signs of dwellings within any of the other fortified sites that have been excavated, e.g., at Zymne or at Plisnes’k.<sup>58</sup> Nonetheless, both sites produced the only settlement finds of dress accessories made of silver that are known from the entire forest belt.<sup>59</sup> A small hoard of torcs and bracelets was found inside the stronghold excavated at Vezhki (near Minsk, Belarus).<sup>60</sup> However, most large collections of silver which may truly be linked to elites have not been found on fortified sites. There is therefore no solid ground for the interpretation of the strongholds in the forest belt either as “seats of power” or associated with the residential quarters of local elites.

53 Dulinicz (2000). This idea has gained supporters in Belarus; see Kolosovskii (2016), 6.

54 Sedin (1995) 161; Fylypchuk (2010), 138.

55 Mitrofanov (1967), 243 and 246–47. For problems of dating the ceramic material from Banceroovshchina, see Lopatin (1989), 18; Lopatin (1993).

56 Sedin (2000), 31–39. Traces of above-ground buildings are also known from Tushemlia, but it remains unclear to which of the three occupation phases they belong [5th to 4th century BC; 2nd to 3rd century AD; 6th to 7th-century; Tret’iakov (1958), 171–73].

57 Symonovich (1963), 120 and 122–23.

58 An observation first made by Timoshchuk (1990), 153. According to Shmidt (1970), 64–65, the timber remains found at Demidovka were from a large house. However, the exact date of those remains cannot be established. Oblomskii (2016), 21–22 is cautious about the dating of the ramparts, but not about the chronology of structures found inside strongholds.

59 Aulikh (1972), 57 pl. XI/7, 10; 62 pl. XII/1, 3, 4, 5, 10, 11, 28; 67 pl. XIII/2, 6–8, 14–16; Fylypchuk (2010), 150 fig. 2/4–6.

60 Kolosovskii (2016), 6 and 8; 7 fig. 2.

On the contrary, everything points to such sites playing the role of communal centers for neighboring settlements. The exact nature of that role is still obscure—administrative, ceremonial, or religious. At any rate, the lack of firm material culture correlates of local elites in the forest belt (beyond the ephemeral association, no doubt for military reasons, with the Empire) strongly suggests that society in the region was less stratified than in the lands farther to the south and southeast. With communities scattered over a vast swathe of land covered with deep forests, it is not surprising that such archaeological phenomena as the long barrows and the strongholds cannot be explained in terms of ranked societies.



## Social Differentiation in the Central Parts of Eastern Europe

Hermanaric, being “the noblest of the Amali,” subdued “many peoples of the north, and made them obey his laws.” Hermanaric’s victories as king of the Goths were so resounding that some “have justly compared him to Alexander the Great.”<sup>1</sup> Jordanes’ comparison of Hermanaric with Alexander the Great has been rightly interpreted as referring to a supposed expansion of the Gothic realm to the east, not to the north. Indeed, two of the “peoples of the north” mentioned by name are the Merens and the Mordens, which Russian historians believe to be the Meria and the Mordva of much later times.<sup>2</sup> The former inhabited the central area of the forest belt between present-day Moscow and Iaroslavl, while the Mordva lived farther to the east, across the Oka River (and gave their name to modern Mordvinia). It is unlikely that Hermanaric ever ruled over all those lands. Where did Jordanes then get the information about what people lived in those remote areas?

Dmitrii Machinskii and Viacheslav Kuleshov believe that only the fur trade could explain the interest of the Romans (either at the time of Hermanaric or at that of Jordanes’ writing his *Getica*) in the “many peoples of the north.”<sup>3</sup> On the basis of another mention in the *Getica* of Hunuguri, who “are known to us from the fact that they trade in marten skins,” Michel Kazanski has built an entire theory about the 6th-century fur trade across Eastern Europe.<sup>4</sup> However, so far no evidence exists either of animals being hunted in the central parts of present-day Russia between the Valdai Heights and the Kama river, or of trade routes crossing the region.<sup>5</sup>

1 Jordanes, *Getica* xxiii 116, 88, transl., 84.

2 Machinskii/Kuleshov (2003), 51–52 and 54; fig. 2 (before page 45); Akhmedov et al (2007), 113.

3 Machinskii/Kuleshov (2003), 63–64.

4 Jordanes, *Getica* v 37, 63, transl., 60; Kazanski (2010a), 225–26; Kazanski (2010c), 4–5. The idea, however, was first put forward by Noonan (2000), 299. For a much more cautious approach to the passage in *Getica*, see Kovalev (2005), 59–60.

5 According to Noonan (2000), 298, it was only in the 9th century, that the lands inhabited by the Meria and the Mordva were included into the network of transcontinental trade. Kovalev (2005), 65–66 notes that the regions involved in the fur trade in the 6th century were along the middle course of the Volga, to the south from its confluence with the Kama.

Bones of fur-bearing animals appear on Meria and Mordva sites only from the 9th century onwards, and the evidence of trapping is even later.<sup>6</sup> Only bones of domestic animals have so far been found on cemetery sites, more of cattle than of sheep or pig.<sup>7</sup> However, the species most commonly found in bone assemblages is the horse.<sup>8</sup> No open settlements are known from the central parts of Eastern Europe, and only a few strongholds have been excavated.<sup>9</sup> On such sites, bones of animals (mostly domestic) have been found together with agricultural tools.<sup>10</sup> Two sickles are known from Kuzebaev (near Alnashi, in southern Udmurtia; Fig. 27).<sup>11</sup> Such tools were also deposited in graves, such as those excavated at Kuzhendeevo (near Arzamas, Russia), in the Lower Oka region south of present-day Nizhnii Novgorod.<sup>12</sup> Another burial assemblage from that same cemetery contained a scythe, and another such implement was found at Varni (near Zura, eastern Udmurtia).<sup>13</sup> Hoes associated with

6 Kovalev (2000), 35 (table 1) and 42.

7 Gorodcov (1914), 85, 107, 128, and 135; 85 fig. 27; Krasnov (1980), 134–35, 142, and 156; Semenov (1980), 82, 85, 87, and 89; Erofeeva/Travkin/Utkin (1988), 126. For sheep (or goat) bones, see Gorodcov (1914), 77 and 112. For pig, see Spicyn (1901), 78. There is also evidence of fowl: Krasnov (1980), 135; Semenov (1980), 91.

8 Spicyn (1901), 75; Gorodcov (1914), 77, 84, 90, and 108; Mongait (1951), 125; Kravchenko (1974), 180; Krasnov (1980), 135, 137, 143, 148, 151, 153, 154, 159, 161, 174, 181, 183; Semenov (1980), 87 and 99; Erofeeva/Travkin/Utkin (1988), 125 and 126.

9 Akhmedov (2010), 13 deplures the absence of any research on open settlements. According to Rozenfel'dt (1987), 133, open settlements appear in the valley of the Upper Chepca river near Glazov (northern Udmurtia) at a later date, possibly during the 8th or 9th centuries. For the stronghold in Berezniaka (near Iaroslavl, to the north from Moscow), see Krasnov (1980). For the stronghold of Gyrkes-shur (Polom, near Zura, in east-central Udmurtia), see Rozenfel'dt (1987), 131. For late 6th- and 7th-century finds from much earlier hillfort sites in the valley of the Upper Oka river between Orel and Kolomna (south of Moscow), see Voroncov (2014).

10 Unfortunately, no zooarchaeological studies of animal bone assemblages from strongholds in the central parts of present-day Russia have so far been published. Nonetheless, according to Akhmedov et al. (2007), 114, the complex economy of the populations in the central region of the forest belt was “dominated by livestock-rearing, which was well suited to the extensive grassland pastures on the Oka.” The idea that the distribution of 6th- to 7th-century cemeteries (primarily in the valley of the Oka) indicates that the local economy was pastoralist goes back to Efimenko (1937), 47–48, who nonetheless referred to a much earlier period of time. Conversely, Noonan (1999), 496 believes that the “roles of agriculture, stock breeding and metallurgy all increased significantly” after AD 500. According to him, the Mordva practiced plow farming, while the chief occupation of the inhabitants of Udmurtia was slash-and-burn agriculture.

11 Ostanina et al. (2011), 102–03 and 200 fig. 31/11. The sickles found at Lukovnia (near Moscow, Russia) may be of a date earlier than the 6th century; see Veksler (1971), 90.

12 Zhiganov (1959), 225 and 227; 226 fig. 9/2, 3.

13 Zhiganov (1959), 226 with fig. 9/1; Semenov (1980), 5 and 124 pl. XVIII/9.

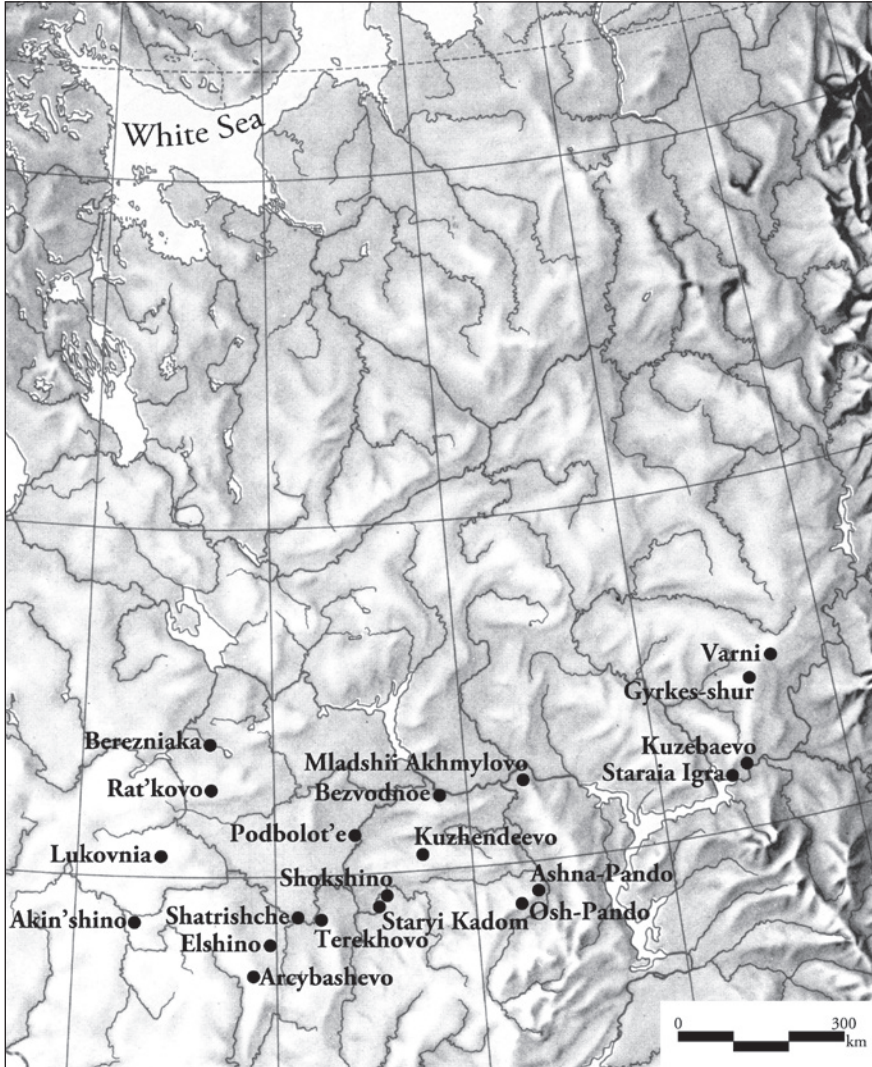


FIGURE 27 Principal sites mentioned in the text and in the notes

slash-and-burning agriculture were also deposited in graves.<sup>14</sup> Russian scholars believe that the transition to permanent field cultivation took place only

14 Gorodcov (1914), 77; Semenov (1980), 99. Slash-and-burning has also been associated with numerous finds of axes on both stronghold and burial sites both in Udmurtia and in the Lower Oka region; see Efimenko (1937), 54; Rozenfel'dt (1987), 133. On the other hand, the exploitation of forest resources results indirectly from finds of wooden vessels, as well as recipients, sheaths, or shoes made of birchbark; see Polesskikh (1979), 30 and 49; Semenov (1980), 76–77, 74 and 79–80.

gradually over the subsequent centuries, under the influence of the agricultural practices from the Middle Volga region (see chapter 12).<sup>15</sup>

Paleobotanical studies confirm the role of crop cultivation. At Osh-Pando (near Dubenki, eastern Mordvinia), the main crop in the 6th and 7th centuries was barley, followed by millet.<sup>16</sup> Barley was also the main crop at Staraia Igra (near Grakhovo, in southern Udmurtia).<sup>17</sup> The significant presence in paleobotanical samples from Osh-Pando of such weeds as cleavers and wild buckwheat suggests that the fields were next to the woods and that yields were quite modest.<sup>18</sup> Seeds of barley, followed by wheat (soft and emmer) and peas have been found in 11 out of 15 cremations of the cemetery excavated in Rat'kovo (near Moscow, Russia).<sup>19</sup> Moreover, in one of those cremation burials, the seeds were associated with four fragments of clay pans, one of the easternmost instances of a culinary practice originating in the Lower Danube region (see chapter 8).<sup>20</sup>

Together with the clay pans, two stone moulds for casting jewelry details were deposited in the grave.<sup>21</sup> Moulds were also found in seven other graves of the same cemetery.<sup>22</sup> One of them is almost identical with one of two moulds found together with a sickle in a female burial of the cemetery excavated in Kuzhendeevo.<sup>23</sup> Both were for casting copper-alloy beads used for decorating the clothes or the headdress.<sup>24</sup> Casting small ornaments in one-piece moulds is also documented archaeologically on stronghold sites, but without any archaeological context.<sup>25</sup> Without any settlement features, it is impossible to

15 Iutina (1996), 441.

16 Tuganaev/Tuganaev (2007), 40 table 6. Barley (but not millet) is also present in the paleobotanical samples from the site of Ashna-Pando, farther to the east, near Surskoe (Ul'ianovsk region, Russia).

17 Tuganaev/Tuganaev (2007), 39.

18 Tuganaev (1973).

19 Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 104. See also Vishnevskii/Novoselova (2010).

20 Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 95 and 99 fig. 5/54–47. Clay pans have also been found during the excavations carried out inside the stronghold at Akin'shino (near Kaluga, south of Moscow), for which see Voroncov (2016), 239 fig. 9/15–24; 240 fig. 9/19; 244 fig. 13/16–26.

21 Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 95 and 99 fig. 5/52, 53.

22 Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 95; 96 fig. 4/14–18; 99 fig. 5/14, 6; 100 fig. 6/4; 101 fig. 7/2, 29; 102 fig. 8/22, 48, 49.

23 Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 99 fig. 5/14; Zhiganov (1959), 225 with fig. 8/1, 2. Another very similar mould was found in grave 1079 of the cemetery excavated in Shokshino (near Ten'gushevo, Mordvinia), but the date of that assemblage is uncertain. See Cirkin (1972), 164 and 165 fig. 3/29; Peterburgskii (1974), 48 and 50; 49 fig. 2/2.

24 Tavlinceva (2000), 111 and 113.

25 Veksler (1971), 90; Ostanina (1979), 194; Akhmedov (2010), 13; Ostanina et al. (2011), 202 fig. 34/1–3; Krenke (2011), 101–06; Krenke (2016), 277–79 and 302 fig. 17. All are stone

gauge the significance of this economic activity, particularly its social impact on local communities. Single ladles were also deposited in graves, sometimes without any other casting tools or implements.<sup>26</sup> Only a few such tools have been found during the excavation of strongholds.<sup>27</sup> By contrast, no crucibles have been found in burial assemblages, although they are known from stronghold sites.<sup>28</sup> Similarly, a pressing die for the production of belt mounts has been found inside the stronghold at Terekhovo (on the right bank of the river Oka, in the region of Riazan').<sup>29</sup> No dies have so far been found in any burial assemblage of the forest zone. There were some in a hoard of brass accidentally found in 2009 in Elshino (near Riazan').<sup>30</sup>

A much greater number of pressing dies are known from the most remarkable assemblage of the forest belt in Eastern Europe, a collection of jeweler tools, raw materials, and half-manufactured products found in 2004 in Kuzebaev. Six dies are concave ("negative") and were most likely used to produce belt fittings such as known from burial assemblages in the easternmost parts of the taiga belt, in the foothills of the Ural Mountains (see chapter 15).<sup>31</sup> Those are unique finds for that part of the European continent with which this book is concerned. Most other dies from Eastern Europe are convex ("positive"). The Kuzebaev hoard also includes ten "positive" dies for the production of belt fittings with a decoration imitating the granulation and filigree of specimens cast in precious metals.<sup>32</sup> In addition, no less than 90 lead models have been found in the collection, mostly for belt fittings (buckles, strap ends, belt mounts), as well as ear- and finger-rings, pendants, and purse mounts.<sup>33</sup> The exact function of those models remains unclear: were they just samples (to be shown as examples of the kind of work that the jeweler was capable of doing)

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moulds. The only clay moulds so far known are from Kuzebaev; see Ostanina et al. (2011), 180 fig. 13/25 and 202 fig. 34/4, 9.

- 26 Gorodcov (1914), 77; Cirkin (1972), 164 and 165 fig. 3/28; Krasnov (1980), 176 and 216 fig. 50/6.
- 27 Veksler (1971), 90; Ostanina et al. (2011), 202 fig. 34/13. Two ladles were found in a hoard assemblage, for which see Ostanina et al. (2011), 125 and 169 (fig. 2/6, 7). One of them was made of a copper-alloy with tin and lead, and still contained in its bowl a small quantity of brass with no less than 20.64 percent lead; see Ostanina et al. (2011), 14, 60, and 125.
- 28 Veksler (1971), 90; Ostanina et al. (2011), 202 fig. 34/8, 10, 12.
- 29 Akhmedov (2016b), 65 and 69 fig. 3/6.
- 30 Akhmedov/Gavrilov (2017), 32 and 33 fig. 12/2-5, 7, 10.
- 31 Ostanina et al. (2011), 171 fig. 4/2-6, 9.
- 32 Ostanina et al. (2011), 170 fig. 3.
- 33 Ostanina et al. (2011), 171 fig. 4/7, 8, 10-12, 15-23; 172 fig. 5; 173 fig. 6; 174 fig. 7/1-3, 5-19, 28. There were also belt mounts and buckles in the collection, some with traces of leather belts, others with remains of textile fabric. See Ostanina et al. (2011), 174 fig. 7/4, 20-23; 176 fig. 9; 177 fig. 10; 178 fig. 11; Ostanina (2017).

or did they have a technological role in the process of casting? That models made of a lead-tin alloy were found in the collection has been interpreted as indicating that casting may have not employed (lost) wax at all. Instead, the model was used to obtain another made of some perishable material—wood, for example. The wooden model was impressed into the soft clay, to create the negative into which the molten metal was then poured.<sup>34</sup> However, it is just as likely that the leaden models were used to obtain their corresponding copper-alloy duplicates. A lead model was necessary for obtaining the mother-mould, which was created when the model was pressed into a piece of soft, damp clay. When the clay dried, the open section of the mother-mould was filled with molten wax. Once hardened, the wax model was taken out of the mother-mould, packed in clay, and baked at a high temperature. The result was a clay mould, into which the molten metal was poured to burn out the wax and to produce the final cast. That casting was the technology to which the leaden models referred results also from the associated ingots (brass, lead-tin alloy, and bronze), as well as the large quantity of scrap metal, including such things as coins of Kushan emperors, imitations of Khwarazmian coins, fragments of ancient tableware, and “Scythian” arrowheads.<sup>35</sup> Pressing dies, casting implements (such as ladles), and leaden models—all suggest technological versatility, while the skills involved are well illustrated by a whole array of tools—hammers, files, shears, anvils, adzes, draw-plates, and even a divider—all directly comparable with the sophisticated implements found in graves with tools from the Carpathian Basin (see chapters 6 and 17).<sup>36</sup>

Much like in East Central Europe, tool kits were occasionally deposited in graves of the forest belt. Fragments of bellows have been found, together with a stone mould, with cremated remains in a cemetery excavated in Rat'kovo.<sup>37</sup> Associated with the male skeleton in a double burial of the cemetery excavated in 1910 in Podbolot'e (on the southwestern outskirts of Murom) was a collection of tools—tongs, an anvil, a ladle, and a crucible.<sup>38</sup> A hammer, an

34 Ostanina et al. (2011), 77. As Heinrich-Tamáska (2008), 246 points out, the existence of wooden models is an unwarranted assumption.

35 Ingots: Ostanina et al. (2011), 168 fig. 1/7; 169 fig. 2/4, 5; 175 fig. 8/4; 180 fig. 13/10–13, 20; 182 fig. 15. Scrap metal: Ostanina et al. (2011), 174 fig. 7/23–25, 27; 180 fig. 13/14, 17–19, 23, 24, 26–28; 184 fig. 17; 185 fig. 18; 186 fig. 19; 187 fig. 20; 195 fig. 23; 198 fig. 24. Fragments of copper-alloy sheet and torcs, most likely serving as scrap metal, are also known from the Elshino hoard; see Akhmedov/Gavrilov (2017) 32 and 33 (fig. 12/3). Scrap metal in the form of bronze sheet was also found in three graves at Rat'kovo; see Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 94 and 93 fig. 3/48, 49; 99 fig. 5/13, 38, 39.

36 Ostanina et al. (2011), 168 fig. 1; 169 fig. 2/1, 2, 8–11; 171 fig. 4/12, 13.

37 Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 94 and 101 fig. 7/28, 29.

38 Gorodcov (1914), 76–77.

anvil, a plane, an adze, and an engraving tool have been found in a pile next to fragments of clay crucibles in a grave of the large cemetery excavated in Mladshii Akhmylovo (near Koz'modem'iansk, in the southern part of the Mari El Republic; Fig. 28).<sup>39</sup> Another tool kit made up of a hand plane, a gouging instrument, a hammer, and tongs was deposited in a special niche carved on the southern side of a grave pit from the Varni cemetery.<sup>40</sup> All those examples show that, much like in the Carpathian Basin, during the 6th and 7th centuries, the skills of the craftsman, particularly those associated with the production of jewelry, were highly appreciated within communities in the central and eastern parts of the forest belt. The deposition of entire tool kits also raises the question of how craftsmen were viewed in the community, and of their social status. It is important to note that most tools deposited in graves found in the forest belt are small, more appropriate for the trade of a jeweler than for that of a smith. The deposition of jeweler tools in graves implies therefore that it was that special craft that was socially valued, despite the clear evidence that blacksmiths were also quite active. No smelting sites are known from the region, but the metallographic analyses of series of implements and weapons from various cemetery sites have indicated that the blacksmiths in the forest belt relied heavily on bog iron.<sup>41</sup> The same analyses have also revealed the importance of heat treatment, as well as the use of cementation and welding for the production of blades.<sup>42</sup> In other words, local blacksmiths had knowledge of techniques, which, though quite simple, still required skill. No blacksmith tools have been deposited in any grave of the forest belt, and no smithies

39 Nikitina (1999), 52 and 107 fig. 25A. Adzes were often deposited singly in graves, with no other tools. See Gorodcov (1914), 83 and 90; Poleskikh (1979), 32, 35, and 49; 35 fig. 2/2; 38 fig. 24/1; 48 fig. 31/17. Similarly, there is a significant number of engraving tools found singly: Spicyn (1901), 77–78; Kravchenko (1974), 161, 179, 180; Gening (1979), 90; Krasnov (1980), 137 and 215 fig. 49/18; Semenov (1980), 68 and 125 pl. XIX/14; Erofeeva/Travkin/Utkin (1988), 115–16 and 118; Shitov (1988), 35 and 37; Nikitina (1999), 46 and 50; 87 fig. 5B/4; 89 fig. 7A/11; 101 fig. 19A/12. Distinguishing between engraving tools and awls is not always easy: Gorodcov (1914), 134; Kravchenko (1974), 160, 163, 172, and 175; Poleskikh (1979), 32; Krasnov (1980), 155; Semenov (1980), 94 and 125 pl. XIX/11; Erofeeva/Travkin/Utkin (1988), 122–23; Shitov (1988), 39 and 56 pl. X/6; Vishnevskii/Kir'ianova/Dobrovol'skaia (2007), 94 and 92 fig. 2/28.

40 Semenov (1980), 98–99 and 124 pl. XVIII/3, 11, 12.

41 According to Ostanina (1979), 194, fragments of blooms and slag have been found during the excavation of the stronghold at Kuzebaevo. However, there were no smelting facilities on the site, and no smithies have been discovered.

42 Peterburgskii (1974), 47; Zav'ialov (1992), 166–67 and 169–70; Perevoshchikov (2002), 18–19 and 63.

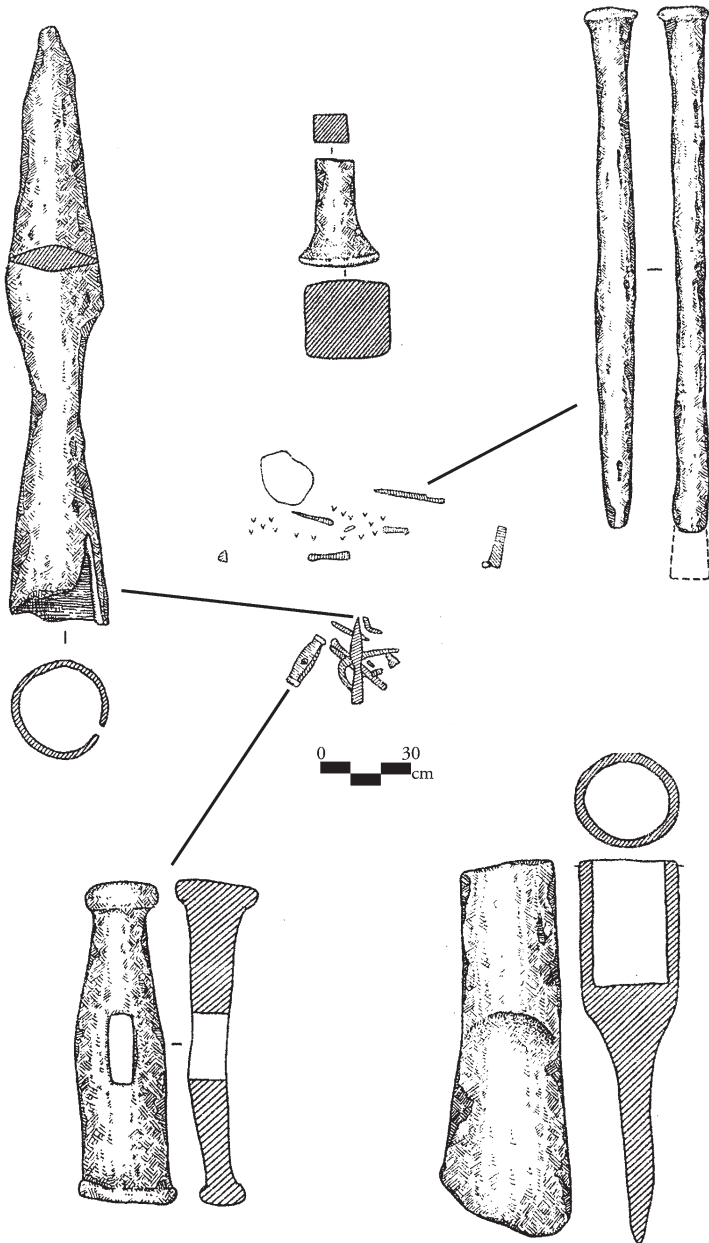


FIGURE 28 Mladshii Akhmylovo (Mari El Republic), grave 115, plan and associated artifacts: spear head, anvil, chisel, hammer, and adze-shaped axe  
 REDRAWN AFTER NIKITINA (1999)



have so far been discovered in any stronghold.<sup>43</sup> Nor is there any evidence (in the form of loom weights or weaving sheds) for textile production, despite the occasional finds of woolen fabric remains in burial assemblages.<sup>44</sup>

The deposition in graves of casting tools and implements was clearly a means to represent social status symbolically. In other words, graves with tools were not necessarily graves of craftsmen. A ladle was found in a grave of the cemetery excavated in Bezvodnoe (on the right bank of the Volga, near Nizhnii Novgorod), together with silver earrings, a diadem, many stone beads and a large number of female dress accessories.<sup>45</sup> On the shank bones of the woman buried there was a bridle bit, while the ladle was found by the skull. Both artifacts were obviously metaphors. Nonetheless, on the basis of that and other burial assemblages, Leonilla Golubeva has advanced the idea that during the early Middle Ages, women were the goldsmiths of communities in the forest belt.<sup>46</sup> Out of 16 assemblages she took into consideration, only five may be dated to the 6th or 7th centuries, and only in two cases were the associated skeletons properly sexed and identified as female.<sup>47</sup> While the possibility cannot be excluded that casting was done by both female and male members of

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43 Arkhipov (1979), 49 believed that the grave with tools found in Mladshii Akhmylovo was the tomb of a blacksmith. However, the associated tools are too small to have been used in a smithy. The hammer is slightly longer than 15 cm, and the anvil is only 5 cm long. Unfortunately, Zav'ialov (1992) contains no data concerning the metallographic analysis of the hammer, the anvil, or any other tools and implements found in that burial assemblage. It is therefore not possible to decide on the basis of the physical properties of the artifacts whether those tools were of local production (i.e., made by local blacksmiths) or perhaps brought from the outside.

44 Gorodcov (1914), 132; Kravchenko (1974), 164–65 (most likely a woolen shirt onto which the trapeze-shaped pendants were sewn; a different kind of fabric was found by the feet and may have been the trim of a skirt or of a dress); Polesskikh (1979), 30; Semenov (1980), 94; Shitov (1988), 42 and 64 pl. XIX/13 (simple woolen tabby woven in a single yarn, with fringes); Nikitina (1999), 124 fig. 42/16 (woolen fringes); Akhmedov (2003), 87. It is important to note that despite the presence of woolen fabrics, there are no bones of sheep in any of the burial assemblages from the corresponding cemeteries (Shatrishche, Varni, and Staryi Kadom).

45 Krasnov (1980), 175–76; 216 fig. 50/6.

46 Golubeva (1984), 75–79.

47 Proper sexing is of crucial significance in this case, because most assemblages have been attributed to females only on the basis of the presence of jewelry and dress accessories. However, as Akhmedov/Belocerkovskaia/Rumianceva (2007), 135 have noted, male burials in the Oka region often include “gifts” of female accessories. In some cases, casting implements were found in double burials, in which one of the skeletons was undoubtedly male; see Golubeva (1988), 32.

local communities, there is little to no evidence that women played such a key role in society prior to the 9th century, when the practice of depositing casting implements in female graves was established.<sup>48</sup> Gender differences, however, were made particularly salient in cemeteries of the forest belt. Diadems, torcs, pectoral discs, and multiple bracelets typically appear in female burials.<sup>49</sup> Male burials are marked by weapons (especially swords, spear heads and axes), penannular fibulae, and belts with fittings of the so-called Martynivka type.<sup>50</sup> As a matter of fact, there are more weapons in graves of the forest belt than in those of any other part of Eastern Europe, including the steppe lands. In this respect, the forest belt of Eastern Europe is directly comparable to the Carpathian Basin in terms of military posturing. Most analogies for some of the high-quality weapons in the forest belt may actually be found only in the Carpathian Basin. That is the case of the ring-pommel sword from Shokshino, for example, with good parallels in Early Avar assemblages of Hungary.<sup>51</sup> Not all swords were found with adult males. A 10-year old child, probably a boy, was buried in Varni with a long sword on the right side of the body, and a belt with bronze fittings next to it.<sup>52</sup> As Igor Gavritukhin notes, this strongly suggests ascribed status, most likely as a result of the fact that the child was from a leading clan. Just like goldsmithing could be used symbolically for the burial of a female, war could serve as a metaphor for the burial of a child.<sup>53</sup> While weapons symbolized the ability to fight, whips marked elevated social status because of their association with horse riding.<sup>54</sup> Only a few men were buried

48 Golubeva (1984), 79–86 and Golubeva (1988), 32–33.

49 Akhmedov/Belocerkovskaia/Rumianceva (2007), 197–98.

50 Spicyn (1901), 79–81 and 83–85; pl. XVI/2; pl. XX/11; Dubynin (1949), 134; Dubynin (1966), 69 and 71 fig. 4/1–4; 166, 169, 174 and 180; 142 fig. 19/2, 3, 4, 8; Poleskikh (1979), 31–32, 33, 35–36 and 37–39; 10 fig. 5; 35 fig. 22/1, 9, 10; 38 fig. 24/1, 4, 5; 40 fig. 25/1, 2; 44 fig. 28/7, 9, 10; Krasnov (1980), 135, 177–78 and 216 fig. 51/1, 2, 9; Semenov (1980), 70 and 76; 130 pl. XXIV/3, 14; Shitov (1988), 32, 36 and 39–40; 48 pl. 11/1, 6, 8, 10, 13; 55 pl. IX/1, 12; 59 pl. XIII/1–4; Belocerkovskaia (2001), 62; Leshchinskaia (1991), 62; Shitov (1994), 163–64; Akhmedov (2015), 37 and 43; 47 fig. 11/6; Akhmedov (2016b), 68; 73 fig. 5/13, 17–19. For the association of swords and belts with silver or bronze fittings, see Poleskikh (1968). For axes as typically deposited in male graves, see Bukina (1998), 282; Akhmedov/Belocerkovskaia (1996), 131–33; Bulankina (2001), 122.

51 Shitov (2002), 172–74; 173 fig. 2/1–3.

52 Gavritukhin/Ivanov (1999), 99–105; 147 fig. 4/1–10; 148 fig. 5/6, 7; 149 fig. 6. For a child buried with a battle axe, see Semenov (1980), 71 and 122 pl. XVI/9.

53 Gavritukhin/Ivanov (1999), 128 wittingly referred to the “craft” of warfare.

54 Akhmedov (2015), 61 even believes that whips were symbols of authority.

with horses.<sup>55</sup> In many other cases, bridle bits and stirrups were deposited in graves as *pars pro toto*.<sup>56</sup>

On each site, there are only a few graves with weapons, commonly placed in the middle of the cemetery, surrounded by female burials with large numbers of grave goods, especially dress accessories.<sup>57</sup> Among those dress accessories, there are occasional finds of pierced coins—drachms struck for Khusro II in the early 7th century.<sup>58</sup> Earlier, non-pierced coins have been found in both burial (a coin struck for Justinian) and in stronghold contexts (a coin struck for Maurice).<sup>59</sup> The transformation of the coins into pendants and their deposition in graves leave no doubt as to their non-monetary use in local communities. However, one cannot exclude the possibility that the coins were obtained by means of some form of exchange with the outside world.<sup>60</sup> The same is true for a Khwarazmian coin from the Kuzebaev hoard, as well as the Soghdian appliques (one of them bearing the image of a monster typically decorating Hindu and Buddhist temples in South and Southeast Asia, known as Kirtimukha) found in the Elshino hoard.<sup>61</sup> Instead of trade, this points to gifts between elites. At any rate, those exotic goods may have exchanged many hands before reaching the forest belt of Eastern Europe.<sup>62</sup> What kind of elites

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- 55 Krasnov (1980), 137, 148–49, 150, 159 and 182–83. A few horses were buried separately: Gorodcov (1914), 77, 107 and 109; Krasnov (1980), 143, 153–54, 159, 161, and 174.
- 56 For bridle bits, see Spicyn (1901), 75, 76, 80–81, 83–85, 88–89, 91–92, 94–95, 97–98, 100 and 102; Gorodcov (1914), 90; Zhiganov (1959), 218 and 223 fig. 5/4; Dubynin (1966), 69 and 72; 71 fig. 4/7, 8; 72 fig. 5/5; Cirkin (1972), 163; 152 fig. 2/25; Kravchenko (1974), 158, 160, 163, 170–71, 175 and 181; Poleskikh (1979), 31–32, 37–39 and 49; 35 fig. 22/11; 38 fig. 24/2; 44 fig. 28/12; 48 fig. 31/18; Krasnov (1980), 149, 151, 155–56, 162, 166, 171, 173, 176, 178, and 183; 217 fig. 53/2, 5, 6; Semenov (1980), 71, 75–76 and 80; 126 pl. XX/1; Erofeeva/Travkin/Utkin (1988), 115, 117–19, 121–22 and 124–25; 133 fig. 8/6; Shitov (1988), 33–35, 39–41 and 43; 50 pl. IV/14; 52 pl. VI/4; 55 pl. IX/5; 59 pl. XIII/5; 64 pl. XVIII/5; 66 pl. XX/15; 69 pl. XXIII/13; Akhmedov/Belocerkovskaia (1996), 132 fig. 20/6 and 133 fig. 21/7; Gavritukhin/Ivanov (1999), 99–105 and 150 fig. 7/10–12; Nikitina (1999), 46 and 50; 87 fig. 5B/2; 101 fig. 19A/11; Shitov (2002), 172–74; 173 fig. 2/5; Akhmedov (2016b), 68 and 73 fig. 5/7. There are fewer finds of stirrups: Cirkin (1972), 163 and 162 fig. 2/21; Semenov (1980), 79–80; 127 pl. XXI/6; Akhmedov (2015), 43 and 47/7.
- 57 Zeleneev/Shitov (1979), 138.
- 58 Semenov (1980), 72 and 79.
- 59 Akhmedov (2016b), 65 and 68; 67 fig. 2/6, 7.
- 60 For other finds of Byzantine origin from the forest belt, see Akhmedov (2016a); Akhmedov (2017). For finds of possibly Sassanian origin, see Bálint (1989), 41–42; 42 fig. 17.
- 61 Ostanina et al. (2011), 174 fig. 7/23; Akhmedov (2014a), 282–84; 293 fig. 2/1, 2. The Central Asian origin of those appliques is confirmed by the chemical analysis of the alloys; see Saprykina (2014).
- 62 This is also the case of the amber and crystal rock beads found in the Elshino hoard; see Akhmedov (2014a), 282. A few such beads, as well as amber pendants have been found in

were those, whose members were buried in the central and eastern parts of European Russia?

Some have interpreted graves with weapons as indicating military retinues.<sup>63</sup> If so, where are the lords served by warriors buried with swords, spear heads and battle axes? Soviet archaeologists were quick to note that some burial assemblages were richer than others, and they took that to be a direct reflection of economic differences in society. Without any explanation for how that inequality developed, societies in the forest belt were quickly pigeonholed as “military democracy.”<sup>64</sup> Like Lewis Morgan, who first introduced the concept, Soviet historians understood the “military democracy” as the transitional stage between kin-based and state societies. “Military democracy” presupposes the existence of an elected and removable chief, a council of the elders, and a popular assembly. Like Friedrich Engels, Soviet historians also saw the “military democracy” as exclusively concerned with war and the organization for war, through which participants came to regard the acquisition of wealth as one of the main purposes in life.<sup>65</sup>

The martial posturing in 6th- to 7th-century communities in the forest belt is evident. However, there is no evidence either of chiefs with military retinues or of councils of elders. In Engels’s terms, “military democracy” was a form of social organization typically associated with the gradual disappearance of communal ownership and with the emergence of private ownership and exploitation based on tribute and clientship. Chiefs set themselves apart from the agrarian substrate and rule through the retinue of warriors. The warrior chief or king controls and exploits the farming communities through tribute and taxation. As a hallmark of a complex pre-state society, scholars emphasize the importance of inter-regional market-places, where trading activities were controlled by kings or chiefs.<sup>66</sup> There is no indication of trading communities in the forest belt, let alone tribute collection or clientship. The conspicuous difference between the forest and the forest-steppe belts is the absence from the former of the hoards so prominent in the archaeological record of

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burial assemblages: Gorodcov (1914), 89; Krasnov (1980), 165 and 182–183; Nikitina (1999), 111 (fig. 29B/6). Akhmedov/Belocerkovskaia/Rumianceva (2007), 233 believe that all glass beads found on burial sites in the central part of the forest belt are of Byzantine origin, possibly from the Lower Danube region. For more evidence of long-distance contacts, see Akhmedov (2014b).

63 Vikhliaev (1988), 17.

64 Vikhliaev (1988), 17.

65 Morgan (1877), 188, 249, 252, and 318; Engels (1968), 581. See also Tolstov (1935); Khazanov (1974); Herrmann (1982), 15; Guhr (1984); Peršic (1988), 150.

66 Engels (1968), 581; Herrmann (1982), 20; Herrmann (1987), 263–64. See also Smith (1976).

the latter. Kuzebaev and Elshino may seem like exceptions, but the former, at least, is not a collection of valuables. Instead, it is a unique assemblage, a truly artisanal hoard.<sup>67</sup> The economic profile of communities in the forest belt may well have been oriented toward agriculture and the consumption of cereal-based foods. Without excavated, open settlements it is not possible to gauge the spatial distribution of labor and the possible development of economic inequality. Nor have strongholds produced so far any evidence of conspicuous consumption or of special artisanal activities that would have turned them into seats of local power. The only evidence that exists, that from cemeteries, is deceiving, for the deposition of artifacts in graves and the selection of those artifacts are not a direct function either of economic inequality or of power organization. Vladimir Gening believed that the basic form of social organization in the forest belt during the early Middle Ages was the village community, but his idea was criticized for being incompatible with the slash-and-burn agriculture.<sup>68</sup> On the basis of the archaeological evidence of cemeteries, others have advanced the idea of small social units, perhaps no more than a few families.<sup>69</sup> Membership in such groups may have been of paramount concern and burial ceremonies may have been used for competition between small groups. It is perhaps not an accident that most artifacts made of precious metal (silver) that have been found in the forest belt are female dress accessories—torcs, earrings, bracelets, pectoral discs, pendants, buckles, strap ends, and belt or dress mounts. Through them, men related to those women may have vicariously expressed claims to social prominence.<sup>70</sup> Belt fittings made of silver have also been found in the grave of a man buried with a horse, which was discovered in the early 20th century in Arcybashevo (near Skopin, south

67 The presence of dies in the Elshino hoard also points to the possibility that that was also an artisanal hoard. However, without a complete and detailed publication of the assemblage, it is impossible to draw any definitive conclusion.

68 Gening (1958), 210. As Oborin (1961), 58–59 put it, the earliest evidence of village communities in the forest belt region along the Middle and Upper Kama river cannot be dated before ca. 1000.

69 Efimenko (1937), 54; Dubynin (1949), 136; Zeleneev/Shitov (1979), 138.

70 Spicyn (1901), 72–81, 83–85, 89, 93–94 and 96; pl. XIV/7, 9; pl. XVI/4–7, 9, 11, 14, 15; pl. XVII/2, 11; pl. XVIII/1; pl. XX/14; pl. XXI/13; pl. XXII/1; Gorodcov (1914), 107–09 and 131–33; Kravchenko (1974), 164–65, 171–72, 174–75, 177, 181 and 183; 144 fig. 23/2; 159 fig. 40; Krasnov (1980), 134–136, 141–42, 145–46, 160, 163–65, 168, 175–76, 177–78, 180–86; 200 fig. 23/1, 5; 200 fig. 24/1; 201 fig. 25/2, 4; 206 fig. 34/1, 5; 208 fig. 38/10, 20; 212 fig. 41/1, 9, 14; Erofeeva/Travkin/Utkin (1988), 113–14 and 119–20; 127 fig. 2/29, 31, 32; 128 fig. 3/14; 131 pl. 6/16; Shitov (1988), 38 and 48 pl. 11/16, 17; Menghin (2007), 346. Belt fittings made of silver have occasionally been found inside strongholds as well: Morozov (2014), 80–82; 82 fig. 1; Akhmedov (2016b), 65 and 69 fig. 3/3, 5.

of Riazan'). However, a second belt set in that same assemblage was made of gold and exquisitely ornamented with filigree.<sup>71</sup> Those are in fact the only early medieval artifacts made of gold that have been found in the forest belt. Arcybashevo is located at the border between the forest and the forest steppe belts, and the grave is dated to the first third or the middle of the 7th century. As such, it is regarded as a testimony of a nomadic intrusion into the forest belt in the context of the political turmoil that led to the establishment of the Khazar qaganate. However, there are no indications of any "foreign" group—nomadic or otherwise—on the southern border of the forest belt.<sup>72</sup> That the man, whoever he may have been, was buried alone, according to traditions from the forest-steppe belt, and with artifacts with multiple parallels in that region, suggests some kind of challenge to local customs of cemetery burial, which were most likely tied to particular families and clans. Arcybashevo may therefore represent a singular, desperate attempt to impose a different form of power upon the local society. If so, it had no repercussions and no followers.

71 Efimenko (1937), 46; Mongait (1951), 124–25; 126 fig. 43; 128 fig. 45; Bálint (1989), 41 with fig. 16.

72 Bálint (1989), 42; Akhmedov (2010), 14–16.

## Prosperity in the Taiga: The Far East of Eastern Europe

The accidental discovery in downtown Ufa of a small hoard of Sassanian silverware was no breaking news.<sup>1</sup> To be sure, in 1941, when the hoard was found, there were more serious concerns, as the city was about to become a major industrial center, following the evacuation to Ufa of a great number of industrial enterprises from the western parts of the Soviet Union occupied by the German army. That the discovery was no surprise was also because finds of Sassanian and Byzantine silverware had been known for a long while in the easternmost parts of Eastern Europe. Some have been found in the late 19th century in the immediate vicinity to the north.<sup>2</sup> Many more were known from the taiga around and to the north from the city of Perm.<sup>3</sup> Within less than a decade after the discovery of the Ufa hoard, no less than three other pieces of silverware were found in Bartym (near Berezovka; Fig. 29). One of them was a bowl full of freshly minted, early Byzantine silver coins struck for emperor Heraclius between 615 and 625.<sup>4</sup> A silver drinking-vessel in the form of a cow or ox head, most likely of Sassanian origin, was found during excavations carried out in the northern part of the taiga, at Vesliana (near Emva, in the Komi Republic), more than 560 miles away from Ufa to the north.<sup>5</sup> Within one and the same grave of the Vesliana cemetery, archaeologists also found two Sassanian drachms, one struck for Peroz in 465, the other for Kavād I in 506.<sup>6</sup> Although

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- 1 Trever/Lukonin (1987), 109, 116, and 126; pls. 20, 21, 89 and 90. Another Sassanian (?) vessel was found in 1878 in a grave excavated on the outskirts of Ufa; see Akhmerov (1951), 133.
  - 2 Trever/Lukonin (1987), 109, 116, 121–23 and 125; pls. 18, 19, 96 and 97.
  - 3 Khvol'son/Pokrovskii/Smirnov (1899); Leshchenko (1970); Trever/Lukonin (1987), 112, 118, 121–22 and 124; pls. 36–41, 107 and 108; Morozov (2005), 84 and 89; Goldina/Pastushenko/Chernykh (2011), 120–21; 271 pl. 80; 272 pls. 81–83. Only five years before the Ufa hoard, another small hoard of Sassanian silverware was discovered at Anikovo (near Cherdyn), the northernmost such hoard so far known from Eastern Europe; see Trever/Lukonin (1987), 108–109, 113–114 and 126; (pls. 7, 16, 58 and 59).
  - 4 Bader (1951), 191 and fig. 3; Goldina/Pastushenko/Chernykh (2011), 121–123 and 124–26; 273 pl. 84; 274 pl. 85; 275 pl. 86; 276 pl. 87; 278 pl. 88; 278 pl. 89; 279 pl. 90; 280 pl. 91; 281 pl. 92; 282 pl. 94; 285 pl. 98/1. See also Belavin (2013), 52–53.
  - 5 Savel'eva (1979), 95 and 95 fig. 3/2.
  - 6 Savel'eva (1979), 95. Sassanian drachms struck for Peroz (five pieces minted between 459 and 484) and Khusro I (minted in 535) have also been found in graves 16 and 25 of the same cemetery; see Savel'eva (1979), 95.



FIGURE 29 Principal sites mentioned in the text and in the notes. The insert (shaded area) shows the extension of the taiga belt in northern Europe  
 BASE MAP FROM FREEWORLDMAPS.NET ([HTTPS://WWW.FREEWORLDMAPS.NET/RUSSIA/URAL-MOUNTAINS/MAP.HTML](https://www.freeworldmaps.net/ruussia/ural-mountains/map.html)),  
 INSERT FROM ECOREGION PA0608 (PUBLIC DOMAIN, [HTTPS://WIKIVISUALLY.COM/WIKI/SCANDINAVIAN\\_AND\\_RUSSIAN\\_TAIGA](https://wikivisually.com/wiki/Scandinavian_and_Russian_Taiga))



one of the northernmost finds of Sassanian coins in Eastern Europe known so far, the drachms discovered in the Komi Republic hardly surprised anyone. By the mid-1970s, when the cemetery at Vesliana was excavated, a great number of Sassanian coins have also been found in the easternmost parts of European Russia.<sup>7</sup> In fact, the number of such coins has now become so significant, that they came to play a statistically crucial role in establishing the chronology of the burial assemblages in the Upper Kama region.<sup>8</sup> Fragments of silk, as well as carnelian, chalcedony, and rock crystal beads bespeak the same “eastern,” exotic connections.<sup>9</sup> While the silk has not been studied in any detail, some of the beads originated in India and southeast Asia, while others were produced in Central Asia.<sup>10</sup>

The evidence seems incontrovertible: the wide variety and multitude of finds, as well as their distribution cannot be explained in terms of elite exchange (gift-giving); it must be the result of trade.<sup>11</sup> Was this trade directly with Sassanian Persia and Byzantium? On the basis of similar finds from the Middle Volga region (see chapter 12), some have indeed argued that the

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- 7 Peroz: Goldina/Koroleva/Makarov (1980), 13. Kavad 1: Goldina/Koroleva/Makarov (1980), 13; Morozov (2005), 84. Khusro 1: Goldina/Koroleva/Makarov (1980), 13; Goldina/Vodolago (1990), 24 and 30; Goldina/Pastushenko/Chernykh (2011), 7; Goldina (2012), 25–27. Hormizd IV: Goldina/Vodolago (1990), 32. Khusro 11: Kondrat’eva (1967), 329; Goldina/Koroleva/Makarov (1980), 13. Unidentified Sassanian coins: Erdélyi/Ojtózi/Gening (1969), 32, 59 and 65; Goldina/Koroleva/Makarov (1980), 13. See also Kharitonov (1962); Morozov (2005). For a distribution map of Sassanian coins in Eastern Europe, see Goldina (2010), 230 fig. 40.
- 8 Morozov (1998). The majority of the Sassanian coins entered the region prior to the fall of Sassanian Persia; see Mingalev (2004), 40.
- 9 Silk: Goldina (2012), 16 and 26; 173 pl. 27/17; 273 pl. 128/10; Goldina (2015), 135; Goldina (2011), 114. Carnelian beads: Gening (1964), 136–37 and 143; Goldina/Koroleva/Makarov (1980), 13; 151 pl. 10/5; 152 pl. 11/2; Goldina/Vodolago (1990), 16 and 175 pl. 29/1; Volkov/Pastushenko (2005–2006), 6 and 10; 34 fig. 16/10, 11; Goldina/Pastushenko/Chernykh (2011), 94–98; 243 pl. 52/1; 244 pl. 53/1–20, 22; 249 pl. 58/13, 2–19; 253 pl. 62/5, 6, 10, 11, 16. Chalcedony beads: Goldina/Koroleva/Makarov (1980), 13 and 156 pl. 15/7. Rock crystal beads: Gening (1964), 137–38 and 143; Goldina/Koroleva/Makarov (1980), 13; 151 pl. 10/11; 156 pl. 15/7; 179 fig. 38/3–4; Goldina/Pastushenko/Chernykh (2011), 96–98; 249 pl. 58/14; 253 pl. 62/8. See also Goldina/Pastushenko/Chernykh (2013), 912; Ruslanova (2015), 129. For cowries, see Bernc/Pastushenko, (2005), 333.
- 10 Goldina (1996), 241–42; Goldina (2011), 111–13; Ruslanova (2014), 95. For various types of glass beads, see Goldina (2015), 137 and 140.
- 11 Noonan (2000), 291 makes the case of a “targeted market”: “Merchants from Central Asia either directly (...) or indirectly (using intermediaries) participated in a commerce which provided Sassanian and Byzantine silver vessels and silver coins to the Finnic peoples of the Kama-Urals area. In return, these people (...) provided the merchants with the furs they had obtained in their own lands and to their north.”

routes reaching the easternmost parts of the Eastern Europe, as far north as the taiga came from the Caucasus region.<sup>12</sup> However, many hoards of coins and silverware combine Byzantine and Sassanian items, while the political situation in the 6th and early 7th century Caucasus region was hardly conducive to a booming trade. Ever since the late 19th century, some Russian scholars have therefore argued that the trade routes that brought silver, silk, and “exotic” beads to the West Ural region came from Central Asia. This was after all the so-called “Northern Silk Road” that crossed Soghdia, Khwarazm, and the desert-steppe region of the Aral and the northern coast of the Caspian Sea to reach the lands along the Middle Kama via the rivers Ural and Belaia.<sup>13</sup> The key agents of that trade were most likely Soghdian merchants, who are believed to have developed the new route in order to avoid paying high tariffs charged by the Sassanians.<sup>14</sup> Some of the pieces of Sassanian and Byzantine silverware from the Kama region have in fact secondary inscriptions either in Hephthalite or in Bukhara script.<sup>15</sup>

Why were locals in the taiga so interested in the silver (either as coins or as silverware)? Thomas Noonan believed that they “desired silver for religious and ritualistic purposes.”<sup>16</sup> Russian scholars nowadays write of a “sacral economy” that transformed not only furs into silver, but also the latter into a most important medium for the expression of fundamental claims to social status and power.<sup>17</sup> There is no dispute about the interest that the (presumably) Soghdian merchants had in the furs of the taiga. Yet, there has been no scholarly exploration of the ways in which the fur trade modified and shaped the local economic and social structures. Hunting fur-bearing animals in Late Antiquity and the early Middle Ages still awaits its historian. The material culture correlates of such economic activities have been found during the excavations carried out in the 1960s in the Vis bog (near Sindor, in the Komi Republic;

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12 Morozov (1995) and Morozov (1996).

13 The argument was first put forward by Teploukhov (1895). For more recent arguments based on coin hoards, see Mingalev (2004), 41–44.

14 Vaissière (2002), 245–48; Kovalev (2005), 60.

15 Trever/Lukonin (1987), 125; Goldina/Pastushenko/Chernykh (2013), 868–69. For Syriac inscriptions, see Khvol’son/Pokrovskii/Smirnov (1899). For Persian inscriptions, see Trever/Lukonin (1987), 123. The very mixture of languages and scripts points to Central Asia as the most likely place, from which the Sassanian and Byzantine silverware was re-exported.

16 Noonan (1982), 286–87.

17 Kuleshov (2017). Byzantine hexagrams have also been found in local “sanctuaries” together with silver ingots; see Mel’nichuk/Vil’danov/Godobin (2004). There are also “sanctuaries” in the taiga region that have produced no silver artifacts whatsoever; see Ashikhmina (1996).

Fig. 30). The excavations uncovered a great number of wooden artifacts, including arrows, the blunt tips of which indicate that they were used to hunt fur-bearing animals of small size. Such arrow tips did not pierce the animal, and thus preserved the integrity of the fur.<sup>18</sup> Runners and brush bows discovered in the nearby settlement site suggest that furs were transported by means of dog sleds to collection points farther to the south.<sup>19</sup> The faunal assemblages from the Vis 2 settlement bespeak the main occupation of its inhabitants. The most numerous are the bones of beaver, followed by marten, northern reindeer, bear, elk, sable, and otter.<sup>20</sup> Beaver dominates in animal bone assemblages from the southern parts of the taiga as well. At Oputiata, a stronghold located on the opposite bank of the Kama from Dobrianka (north of Perm), the only bones of fur-bearing animals found on the site are of beaver.<sup>21</sup> Hunting fur-bearing animals was an important economic activity in the south as well. The stronghold at Oputiata may have served as one of the collection points for pelts. However, unlike sites in the northern parts of the taiga (on the territory of the present-day Komi Republic), at Oputiata, almost two thirds of all animal bones are of domestic, not wild animals. More than half of the bones of domestic animals are of cattle, followed by horse.<sup>22</sup> On cemetery sites in the south, the proportion is reversed: there are many more horse than cattle bones in graves.<sup>23</sup> There can be no doubt, therefore, that the economy of the southern region of the taiga had a pastoral component.

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- 18 Burov (1983), 61 and 56 fig. 1/6, 7. Moreover, in the case of the beaver, the highly valued castor oil was not spilled when the animal was hit with a blunt-tip arrow [Kovalev (2000), 36]. The Vis bog also produced evidence of weirs, in addition to wooden floats, fishing hooks, and oars; see Burov (1984), 148–65; 156 fig. 5/4; 159 fig. 7/1, 2, 5, 6; 163 fig. 8/1–6.
- 19 Burov (1992) and Burov (1995). The bones of the sled dogs have been found on several settlement sites; see Korolev/Murygin/Savel'eva (1997), 439.
- 20 Savel'eva (1981), 17; Korolev/Murygin/Savel'eva (1997), 438 Table 3; Korolev (1997), 47. Hunting fur-bearing animals is also associated with the great number of stone scrapers found on sites in the northern taiga. Such tools were used to clean the skins. See Murygin (1980), 81 and 85 fig. 8/9, 15–17; Korolev (1986), 97 and 96 fig. 2/5–9; Chesnokova (1987), 93; Ashikhmina et al. (1988), 6; Korolev (1997), 131 and 133.
- 21 Goldina (1985), 150 with table 25.
- 22 Goldina (1985), 148 with table 23; 149 with table 2; Goldina/Kananin (1989), 98 with table 29. By contrast, cattle, horse, and sheep bones at Vis 2 do not represent more than 3 percent of the faunal assemblage; see Savel'eva (1981), 17; Korolev/Murygin/Savel'eva (1997), 439. Among wild animals, the bones of which were found at Oputiata, the largest proportion is of elk, not beaver. A small number of pig bones even suggest that the local community was sedentary.
- 23 Erdélyi/Ojtózi/Gening (1969), 20–21, 29, 31 and 64; Volkov/Pastushenko (2005–2006), 7 and 9; Goldina (2012), 18–19 and 22. More often than not, the only parts of a horse's body that were found in graves are teeth or jaws. For cattle bones, see Erdélyi/Ojtózi/Gening (1969), 21. See also Goldina (2008), 127.

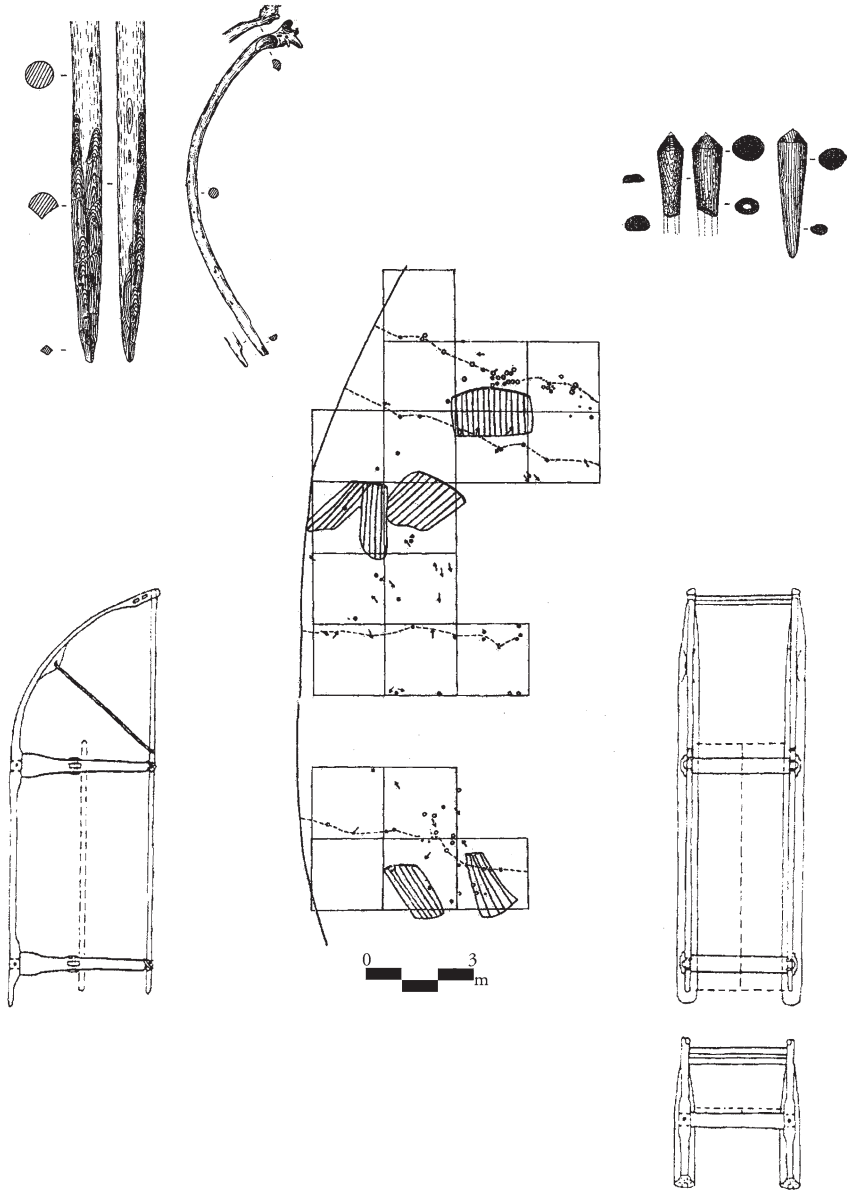


FIGURE 30 Vis (Komi Republic), plan of the bog excavation of fish weirs with a wood stake and a basket withy, blunt wooden arrow heads and a reconstruction of the sled found in the excavation of the settlement  
 REDRAWN AFTER BUROV (1983), BUROV (1984), AND BUROV (1995)

However, according to Soviet and Russian archaeologists, slash-and-burn agriculture was also an important, if not the main economic activity in that region.<sup>24</sup> Cereal seeds have been found on two sites—Verkh Saia 1 and Bartym 1 (both near Berezovka, Russia)—but leaving aside the problematic dating of the samples, most representative species commonly appear in much warmer climates: hulled and common wheat, as well as barley.<sup>25</sup> Few traces of weeds have been found in the paleobotanical samples from Verkh Saia, which has rightly been interpreted as the result of careful threshing.<sup>26</sup> If so, then the grain in question was not produced locally, but brought from somewhere else, perhaps by means of trade. Very few agricultural tools, querns or any other implements for food processing have been found on sites in the taiga.<sup>27</sup>

Why did Soviet and Russian archaeologists insist then that slash-and-burn agriculture was practiced in the taiga during the 6th and 7th centuries? In an attempt to explain the presence of smelting furnaces inside the Oputiata stronghold, Vladimir Gening cited Engels to support the idea that during Late Antiquity and the early Middle Ages, the second great division of labor took place in the Upper Kama region, when handicrafts separated from agriculture.<sup>28</sup> In order for ironworking to become an independent economic activity, agriculture must have been practiced for a while as the main subsistence strategy. Slash-and-burn agriculture was therefore necessary to pigeonhole the archaeological evidence in the taiga into a Marxist evolutionary scheme. Without the

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24 Prokopov (1983), 101; Pastushenko (2002), 270–71. According to Savel'eva (1978), 20, some of the implements found in the Vis 2 settlement are wooden hoes supposedly used in slash-and-burn agriculture.

25 Pastushenko (2002), 270 with table 1. According to Tuganaev/Efimova (1985), 28, the multitude of crops indicates three-field rotation. The cereal seeds from pit 28 in Bartym were found in the filling, not on the bottom of the pit; see Goldina/Pastushenko/Chernykh (2011), 23.

26 Tuganaev/Tuganaev (2007), 42–43. The samples include such weeds as lamb's quarters, Edmonton hempnettle, cleavers, henbit dead-nettle, common sorrel, and vetch. Of those, at least Edmonton hempnettle and vetch are native to northern Europe. Except Edmonton hempnettle, all are edible and may have been intentionally mixed with the grain seeds.

27 For the sickle found in Bartym, see Goldina/Pastushenko/Chernykh (2011), 202 pl. 11/2; Pastushenko (2002), 269. For the fragment of a quern among the stones surrounding the hearth in house 1, see Goldina/Pastushenko/Chernykh (2011), 10. For mortars and pestles from Oputiata, see Gening (1980), 116–17; 206 fig. 12/1–6. Goldina (1985), 159–60 mentions a hoard of 185 hoes, nine spear heads and six bronze torcs in a stronghold excavated in Buisikii-Perevoz (near Medvedok, on the Lower Viatka), but the site is located much farther to the southwest, on the border between the forest belt and the taiga. Moreover, a 5th- to 6th-century date for the assemblage is not secured.

28 Gening (1980), 133–34.

economic basis of a developed agriculture, craftsmen could not dedicate their time to an activity that was not designed to produce (their own) food. Having no support from the rest of the society, they had no incentive to introduce innovative technologies and to establish themselves in industrial centers like Oputiata.

On the northern side of the stronghold excavated in the early 1950s, Gening found 21 features, all remains of smelting and ironworking facilities.<sup>29</sup> Slag, fragments of iron ore (bog iron), and stone slabs used as anvils, betray the economic function of this northern sector, as do the remains of two underground furnaces.<sup>30</sup> Based on the capacity of those furnaces, it has been established that no more than 4–5 kg of iron in the form of bloom could be obtained at every smelting. Eight above-ground houses on the southern side of the stronghold were likely the dwellings of the smelters.<sup>31</sup> No other smelting center has so far been found in the taiga, but there are clear indications of ironworking on many other sites.<sup>32</sup> It remains unclear for whom worked the Oputiata smelters. Nor is it clear where were the smiths who produced the iron tools, implements, and weapons found in contemporary cemeteries.<sup>33</sup> While no blacksmith tools are so far known from the taiga region, the mandrils,<sup>34</sup> awls,<sup>35</sup> engraving tools,<sup>36</sup> basses,<sup>37</sup> and adzes<sup>38</sup> found on settlement and cemetery sites were most likely produced locally.<sup>39</sup> The metallographic analysis of some

29 Gening (1980), 99–102.

30 Gening (1980), 210 figs. 16 and 17.

31 Gening (1980), 108–13.

32 Murygin (1980), 78, 81 and 86; Korolev (1986), 97; Ashikhmina et al. (1988), 6; Murygin/Pliusnin (1993), 102 and 104; Goldina/Pastushenko/Chernykh (2011), 79–80.

33 Korolev/Murygin/Savel'eva (1997), 440–41 believe that smiths in the northern parts of the taiga obtained their iron in the form of blooms from elsewhere (possibly from smelting sites in the south, such as Oputiata).

34 Goldina/Pastushenko/Chernykh (2011), 194 fig. 3/4, 6; 158 fig. 1/1.

35 Murygin/Pliusnin (1993), 104 and 105 fig. 2/19.

36 Goldina/Koroleva/Makarov (1980), 13 and 154 pl. 13/20; 179 pl. 38/15; Goldina/Vodolago (1990), 15 and 169 pl. 24/7; Goldina/Pastushenko/Chernykh (2011), 164 fig. 16/6, 7; 194 pl. 3/10, 14; Goldina (2012), 21; 232 pl. 87/6, 7; 237 pl. 92/8.

37 Gening (1964), 136 and 160 pl. IX/20; Goldina/Pastushenko/Chernykh (2011), 81 and 207 pl. 16/3.

38 Goldina/Koroleva/Makarov (1980), 13; 168 pl. 28/2; 179 fig. 38/17; Goldina/Pastushenko/Chernykh (2011), 81 and 162 fig. 14/4.

39 The same is true for such artifacts as flint steels, fishing hooks, buckles, knives, bridle bits and stirrups, and for such weapons as arrow and spear heads. For the metallographic analysis of knives and axes from Verkh Saia and Bartym, see Perevoshchikov (2002), 51–54 and 56–57. For the numerous finds of stirrups, see E Erdélyi/Ojtózi/Gening (1969), 64 and 66; pl. XI/12; pl. LXX/3; pl. LXXXVII/4; pl. XCIV/4; Goldina/Koroleva/Makarov (1980), 13 and 175 pl. 34/21; Goldina/Vodolago (1990), 29–31 and 34–35; 146 pl. XLIX/3–5, 8, 11; Volkov/

of the tools and weapons found in Bartym and Verkh Saia shows that they were all made by quenching.<sup>40</sup> Cementation, multi-layering (especially sandwiching a steel cutting edge between two flanks of ferritic, phosphoric, low carbon steel or piled iron), and welding were all used for the production of those tools and weapons.<sup>41</sup> Occasional finds of crucibles indicate that non-ferrous metallurgy was also practiced, most likely at a household level.<sup>42</sup> However, no 6th- or 7th-century moulds or ladles are so far known from sites in the southern parts of the taiga.<sup>43</sup> Particularly troubling is the absence of any traces left by the production of the so-called Permian bronze casts, plaque-like artifacts with images of humans, animals, and fantastic creatures that have interpreted as objects of cult, as many are known from hoards and sanctuaries in the Pechora region.<sup>44</sup> With no metallographic analyses of specimens dated to the 6th or

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- Pastushenko (2005–2006), 7 and 10–11; 22 pl. 4/7; 36 fig. 18/1; Goldina (2012), 13–17, 21, 23–25 and 29; 147 pl. 2/7; 149 pl. 4/1, 2; 157 pl. 12/2; 163 pl. 18/4; 165 pl. 20/9; 175 pl. 29/8; 189 pl. 44/6; 224 pl. 79/4; 246 pl. 101/4, 5; 254 pl. 109/13; 257 pl. 112/4; 298 pl. 153/8. The southeastern part of the taiga is the region in Europe with the largest number of 7th-century stirrups, after the Carpathian Basin.
- 40 Perevoshchikov (2001), 249. It remains unclear whether any of the swords found in the taiga was made locally, as none was the subject of metallographic analysis. See Gening (1964), 143 and 159 pl. VIII/7; Erdélyi/Ojtózi/Gening (1969), 64; pl. II/2; pl. VII/6; pl. LIX; Poliakov (1984), 172; Ashikhmina (1987), 163; Goldina/Vodolago (1990), 57; 242 pl. 97/1, 149 pl. LII/1–3, 8; Volkov/Pastushenko (2005–2006), 7 and 22 fig. 4/4.9; Goldina (2012), 226 pl. 81/5; 241 pl. 96/9; 245 pl. 100/12. Ovsianikov (1998), 295–96 notes that most arrow heads, battle axes, and spear heads found on cemetery sites in the Upper Kama region are entirely new types of weapons with no traditions in the region. The mail coat found at Vesliana was most likely made in Sassanian Persia, much like the silver rhyton together with which it was associated in the same burial assemblage; see Savel'eva (1979), 95.
- 41 Perevoshchikov (2001), 51–54 and 61–62; Goldina (2008), 134.
- 42 For crucibles, see Murygin/Pliusnin (1993), 99 and 104; 105 fig. 2/23, 24; Goldina/Pastushenko/Chernykh (2011), 84 and 87; 215 pl. 24/2, 7, 9; 228 pl. 37/1; 230 pl. 39/1.
- 43 By contrast, ladles and moulds have been found in the northern parts of the taiga. See Murygin (1980), 81 and 85 fig. 8/6, 7; Makarov (1986), 29 and 25 fig. 2/3; Korolev/Savel'eva (1988), 19; Korolev/Murygin/ Savel'eva (1997), 426–27. The bronze spoons deposited in some graves were not meant for casting. See Gening (1964), 140 and 154 pl. III/31; Goldina/Koroleva/Makarov (1980), 13; 163 pl. 22/13; 179 pl. 38/16; Goldina/Vodolago (1990), 137 pl. XL/21, 22. Four specimens with elaborate decoration on the handle have been found in a hoard discovered in 1930 at Podcher'ie (near Vuktyl, Komi Republic) on the Upper Pechora River; see Gorodcov (1937), 133 fig. 25/30, 31; 135 fig. 26/32–34. For the ritual significance of such spoons deposited at a later time in burial assemblages of the central part of the forest belt, see Grishakov/Sedyshev/Liubimkina (2016).
- 44 Oborin (1976); Oborin/Chagin (1988); Ignatov (1994); Lipin (1994); Krosigk (1999). A distinct variant has been identified for the Upper Pechora region; see Burov (1992). For a plaque with images believed to represent a sable and a marten, see Korolev/Murygin/Savel'eva (1997), 439 and 469 fig. 26/19. For a history of research on the Permian bronze casts, see Ignat'eva (2007).

7th centuries, it is impossible to verify Rimma Goldina's claim that the raw material for the copper alloys came from cupriferous sandstones in the Upper Kama region.<sup>45</sup> All known specimens have been cast in one-piece moulds, but no such moulds have been found. This suggests that some specimens may have served as models for casting in clay moulds. Equally enigmatic remains the production of mortuary masks, such as found in Demenki (near Il'inskii, on the Upper Kama) and Vesliana.<sup>46</sup> The masks were made of thin gold or silver sheet, with holes for the eyes. No study has so far clarified the origin of the gold and of the silver, the place and manner in which the metal was laminated, and the technique employed to cut out eyeholes.

Judging from the existing evidence, most crafts seem to have been organized, unlike smelting, at a household level. That much results, for example, from finds of half-manufactured bone artifacts in some of the settlement features excavated in Bartym.<sup>47</sup> Awls made of bone were occasionally deposited in graves.<sup>48</sup> However, the most conspicuous products of bone and antler processing were arrowheads, each of a shape designed for a particular task in hunting.<sup>49</sup> Even though elks were hunted in the taiga, there is no indication of antler being processed at all. Conversely, although the evidence of sheep bones is meager, fragments of woolen fabric have been found in burial assemblages.<sup>50</sup>

Despite the prominent role of smelting, at least on some of the sites excavated in the taiga, there is no evidence that craftsmen (in general, not just smelters) had any special status. If they did, that status was definitely not

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- 45 Goldina (1985), 160. For the lack of any chemical analyses, see Oborin/Chagin (1988), 15. For the use of multi-component alloys for casts that could be dated earlier (5th to 6th century), see Korolev/Murygin/ Savel'eva (1997), 420–21.
- 46 Gening (1964), 131 and 158 pl. VII/13; Ashikhmina et al. (1988), 8; Savel'eva (1979), 93 and 92 fig. 1/26, 27.
- 47 Goldina/Pastushenko/Chernykh (2011), 80, 83 and 87; 160 fig. 12/3; 206 pl. 15/3; 207 pl. 16/2; 208 pl. 17/5. Two of the features excavated in Bartym have been interpreted as "ritual" pits.
- 48 Erdélyi/Ojtózi/Gening (1969), 24 and 28; pls. XXIII; LXXII/8.
- 49 Gening (1964), 128 and 143; 160 pl. IX/12, 14; Goldina/Koroleva/Makarov (1980), 13, 15, 22, 24, and 29; 154 pl. 9/2; 167 pl. 23/2, 3; 238 pl. 93/14; 251 pl. 106/5; 254 pl. 109/11; 298 pl. 153/3; Goldina/Vodolago (1990), 33; 143 pl. XLVI/3, 5, 7, 25; Bagin/Chesnokova (1997); Volkov/Pastushenko (2005–2006), 8 and 9; 25 pl. 7/6.6, 12, 13; 29 pl. 11/3; Bernc/Pastushenko (2007); Goldina/Pastushenko/Chernykh (2011), 83 and 195 pl. 4/4. Chesnokova (1987), 93 notes that arrowheads made of bone are particularly frequent in those regions of the taiga that are closer to the Ural Mountains. Unfortunately, there is no study dedicated specifically to bone processing in the taiga during the early Middle Ages. As a consequence, it remains unclear what animal species were preferred for what artifacts, and why.
- 50 Erdélyi/Ojtózi/Gening (1969), 66 and pl. 11/1; Korolev/Murygin/Savel'eva (1997), 441; Goldina (2012), 14 and 96 pl. 5/1. No loom weights have been found on any site in the taiga. See also Goldina (2008), 127–28.



marked in burial. Svetlana Kovtun's statistical analysis of the Nevolino and Verkh Saia cemeteries has demonstrated that the most conspicuous element of differentiation was gender.<sup>51</sup> For males, in particular, the deposition of weapons was a defining element. However, there were many more graves of men with arrowheads made of bone (some of which appear in female graves as well) than graves of men with swords. The latter represent the upper echelon of the developing social hierarchy, while men buried with arrowheads made of bone, as well as (in the 7th century) spearheads, stirrups, and bridle bits represent the group of experienced hunters. Even though Kovtun's research is based on the questionable assumption that burial customs were a mirror of social reality, the idea that rich burials were set up by rich people is not without value. Elevated social status was definitely marked in conspicuously rich burials. Such burials—some cremations, the other inhumations—produced gold and silver dress accessories.<sup>52</sup> As Rimma Goldina has pointed out, marking social status by such means may have been quite effective, because communities who buried their dead in those cemeteries were relatively small.<sup>53</sup> Burial ceremonies, as well as claims to power and, perhaps, property had a stronger impact on fewer people. That each family had a relatively small number of members also results from the size of the dwellings uncovered on settlement sites, such as Bartym.<sup>54</sup> However, that was not a simple hamlet. A fragment of an amphora was found in one of the “ritual” pits on the site, an amber bead in another.<sup>55</sup> A hoard of 272 silver coins, all hexagrams struck in Constantinople was discovered near the settlement. The coins present no traces of wear and may therefore have reached Bartym shortly after leaving the mint.<sup>56</sup> Several other hoards or individual finds of silverware are known from the vicinity.

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51 Kovtun (2006) and Kovtun (2010), 48 and 49.

52 Cremations: Goldina/Koroleva/Makarov (1980), 13; 144 pl. 4/2–10; 149 pl. 8/2–3; 156 pl. 15/3. Inhumations: Goldina/Vodolago (1990), 23 and 129 pl. xxxii/52; Volkov/Pastushenko (2006–2006), 10.

53 Goldina, (2008), 135 believes that the basic social unit was the patriarchal (extended) family.

54 Goldina/Pastushenko/Chernykh (2013), 898. Both Bartym and Iadmas (near Usogorsk, Komi Republic) had only four dwellings each, an indication that open settlements in the taiga were typically small. See Murygin/Pliusnin (1993), 99; Rusanova (1976), 202; Guslicer/Mel'nichuk/Pavlov (1986), 125–26; Pastushenko (1991), 68–69; Goldina/Pastushenko/Chernykh (2011), 5–9.

55 Goldina/Pastushenko/Chernykh (2013), 904; Goldina/Pastushenko/Chernykh (2011), 82.

56 Goldina/Pastushenko/Chernykh (2011), 124–126, who note that all coins are die-linked. The hoard also included the fastener of a silver chain, the closest analogy of which was found in Agafonovo; see Goldina/Pastushenko/Chernykh (2013), 912–13; 913 fig. 30; 915 (fig. 32/2).

However, those were not the only hoards in that taiga. No less than 12 other hoards are known so far, which makes the taiga region directly comparable with the forest-steppe zone (see chapter 12).<sup>57</sup> Unlike hoards for other regions of Eastern Europe, those from the taiga have been traditionally studied either from an art history or from a numismatic point of view.<sup>58</sup> Others have dealt with hoards in the taiga as the primary evidence in discussions regarding early medieval trade.<sup>59</sup> Because silver (in the form of coins or ingots) has been found on sites regarded as sanctuaries, the hoards have been interpreted as communal property. However, silver vessels found in the taiga bear no traces of cult usage—no secondary engravings, and no holes for suspension.<sup>60</sup> Instead, the evidence points to the individual ownership of those vessels.<sup>61</sup> The hoards, in other words, were simply another mode of displaying elevated social status, which is directly comparable to burial assemblages, much like in the forest-steppe zone. Hoards are also collections of valuables, and in the taiga they certainly indicate accumulation of wealth and social differentiation. Those were neither the result of a gradual social evolution based on economic development (primarily of agriculture), nor a symptom of the disintegration of the “primitive” economy, as Soviet archaeologists had it. To judge from the existing evidence, the extraordinary prosperity of some communities in the taiga was caused primarily by the intensification of the fur trade with Central Asia and, perhaps, Byzantium.<sup>62</sup> A local elite emerged which was capable to control the collection and, probably, the commercialization of pelts, and, at the same time, to organize ironworking in specific centers, on a scale without precedent in the taiga region. Many more studies of the subsistence economy in that region are needed, but from what has already been done it is already clear that communities of hunters (and, perhaps, gatherers) could very well accumulate a substantial amount of wealth within a relatively short period of time. Far from being the scene of the last stage of the “primitive” commune, the far east of Eastern Europe became in Late Antiquity and the early Middle Ages one of its most prosperous regions.

57 Gorodcov (1937), 113–20, 122–25, 128, and 129–38; Trever/Lukonin (1987), 108–09, 112–14, 118, 121–22, and 124; Morozov (2005), 83–84 and 88–89; Goldina (2010), 170–71.

58 Maculevich (1940); Noonan (1982); Morozov (1996); Mingalev (2004).

59 Bader (1951); Goldina/Chernykh (2005), 56; Marshak (2006), 72–74.

60 By contrast, some coins found in graves were clearly pierced in order to be turned into pendants. See Gening (1964), 128; Goldina (2012), 20–21.

61 Goldina/Pastushenko/Chernykh (2013), 924.

62 One of the most intriguing pieces of evidence that suggest commercial relations with Byzantium is a bronze weight of 4 ounces (78.7 g) found at Verkh Saia; Goldina/Pastushenko/Chernykh (2011), 288 pl. 101.



**PART 3**

*Specific Trends*





## Property

A particularly resistant stereotype about the early Middle Ages is that “barbarian” societies were simple, with individual property being purely personal, while land, the basic source of subsistence, was collectively held. In the late 1950s, the Romanian sociologist Henri H. Stahl envisioned the “archaic village” in existence throughout the entire period between the 3rd and the 16th centuries, as an egalitarian and democratic community, in which the arable and the meadowlands was in common, and which practiced a form of shifting farming based on forest clearing.<sup>1</sup> Fifty years later, Chris Wickham still believed that the absence of exclusive ownership rights (in other words, the predominance of the communal property) was a good sign of the presence of a “ranked, peasant-mode society.”<sup>2</sup> Moreover, another stubborn misconception is that in East Central Europe, the development of property relations lagged behind that of Western Europe.<sup>3</sup>

No surprise, therefore, that property gets less attention nowadays than it did half-a-century ago.<sup>4</sup> As broadly understood, property determines exclusive rights to things: property is something possessed, but also the exclusive

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1 Stahl (1958–1965), vol. 1, p. 13; Stahl (1980), 37 and 63–79. Stahl’s notion of “archaic village” is very similar to the peasant “closed corporate community,” a seminal concept proposed about the same time by Wolf (1957). Like Stahl, Wolf believed that in the “closed corporate community” of peasants land was in “outright communal tenure.” Both Stahl and Wolf believed “closed corporate communities” forbade alienation of village land to outsiders. As Guga (2015), 250 points out, the inspiration for Stahl’s idea of “archaic village” came from Karl Marx’s 1881 letter to Vera Zasulich, in which Marx compared the agrarian commune of Tacitus’ *Germania* to that of 19th-century Russia (*mir*). For Marx’s letter to Vera Zasulich, see also Hinada (1975), 70 and Sawyer 1977, 65–66.

2 Wickham (2006), 305. In northern Europe, the land tenure in the local “tribal type of society” was presumably not organized along Roman lines of exclusive ownership; see Wickham (2006), 541. Wickham does not neglect the fact that most economically valuable lands in his “peasant-mode societies” remained in local private ownership. The underlying assumption is that in northern Europe the transition was from a mode of production based on communal land ownership, the division of labor based on kinship, and the absence of market to a “peasant mode of production” in which there is some individual ownership of land, a social division of labor, and a political hierarchy separate from kinship.

3 Bakó (1972); Donat (1980); Donat (1982).

4 Herskovits (1940), 271–352; Hoebel (1954), 51–63. For a recent revival of interest in historical studies of medieval property rights, see Khachatourian (2017).

right to hold, use, and or dispose of that something.<sup>5</sup> If one takes property to be the distribution of social entitlements, then one can investigate property anywhere in time and space, even though the notion (and the word used to describe it) are byproducts of a Western liberal paradigm.<sup>6</sup> There is therefore no anachronism in studying property relations in pre-capitalist societies. Whether property involves legally established rights is still a matter of dispute, particularly among historians of the early Middle Ages. Is exclusive ownership the equivalent of private property? Can usufruct be used as a proxy for property rights?<sup>7</sup> Are communal and private property (rights) mutually exclusive? Those are questions as important as the type of land tenure, the methods by which wealth is channeled upwards, or the means by which kings exercise control over outlying areas.<sup>8</sup> However, of much greater significance for the study of early medieval property, especially from an archaeological point of view, is the idea that at the core of property relations is the right to exclude.<sup>9</sup> Moreover, property being integral to all concepts of social institutions, its study is located at the intersection of economics, politics, and law, and thus essentially about “how people are related to resources and to each other.”<sup>10</sup>

The assumption of an extensive communal property in the early Middle Ages is not (and cannot be) verified by archaeological sources. To Boris Timoshchuk, eight pits found in the middle of what he believed to be the communal area in the center of the settlement site at Kodyn 2 (near Chernivtsi, Ukraine) were proof of the communal character of both property and production inside the small community living there during the 6th and the 7th centuries.<sup>11</sup> Leaving aside the lack of any finds indicating that any of those pits served as silos, supposedly for the storage of food for the entire community, several, similar pits have been found next to individual houses on the site. The distribution of those pits strongly suggests that each one of them was in use for the family or group of people living in each house. It would be tempting to interpret that as an indication of private, or at least family property, but the

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5 Earle (2000), 40.

6 Hann (1998), 7.

7 As suggested by Costin (1998).

8 Wickham (2006), 370.

9 North (1981), 21.

10 Earle (2000), 40.

11 Timoshchuk (1990) 17 and 18 fig. 5; Timoshchuk (1995), 132. For a plan of the settlement with the position of the eight pits, see Rusanova/Timoshchuk (1984), 10 fig. 5. The plans of only two out of those eight pits have been published; see Rusanova/Timoshchuk (1984), 37 fig. 26/2, 3. Only wheel-made pottery has been found in pit 7, which raises serious doubts about the 6th- to 7th-century date advanced for any of those settlement features; see Rusanova/Timoshchuk (1984), 83 pl. 33/11, 12.

evidence points to those being refuse pits, not silos.<sup>12</sup> Moreover, the absence of material correlates of private property is no proof of communal property. The two forms of property most likely coexisted in various types of combinations. Rights to such resources as tracts of land of low fertility, grazing fields, or forests located at a significant distance from the settlement were not necessarily individualized. By contrast, any lands requiring a substantial investment of time and labor—be it for intensified cultivation, or for restoring fertility—may have been associated with rights of continuous cultivation, bequeathing, and even sale. In fact, some have insisted that the 6th- to 7th-century village community on the territory of present-day Romania was based on each constitutive family cultivating its own plot of land, which it retained in full property (see chapter 8). Others have argued that the stable association of particular plots with individual families and the development of private property were typically associated with, if not caused by the intensification of farming.<sup>13</sup> Jack Goody has distinguished between technologies based on hoe (or digging stick), which are conducive to egalitarian social relations, and technologies based on plow which provide the basis for more hierarchical relations.<sup>14</sup> Whether or not such finds as the plowshare from Gropșani could serve as evidence for the intensification of farming, there is very little evidence of hierarchical relations between settlement sites excavated in Romania (see chapter 8). The author of the military treatise known as the *Strategikon* knew that the Sclavenes in the lands north of the Lower Danube “possess an abundance of all sorts of livestock and produce, which they store in heaps.” Moreover, the Sclavenes “bury their valuable possessions in secret places, keeping nothing unnecessary in sight.”<sup>15</sup> However, there is no information in the *Strategikon* about who exactly among the Sclavenes could have owned all of those possessions, especially the livestock. Nor can the mention of “secret places” be interpreted as storage facilities, supposedly under the local chief’s control, as some have argued.<sup>16</sup> It is quite possible that the passage in question refers to village reserves of food, but keeping all valuable possessions in “secret places” may have been simply

12 Rusanova/Timoshchuk (1984), 61. Timoshchuk (1995), 132 believed that house 18 in Kodyn 1, in which three silos have been found, was also proof of communal property. Leaving aside the inconsistency of using silos inside an individual house to argue about communal property, the associated ceramic finds indicate a late 7th- or even 8th-century date; see Rusanova/Timoshchuk (1984), 50–51; 37 fig 27; 75 pl. 17/129–19.

13 Collier (1975), 62; Netting (1993), 158–60 and 172.

14 Goody (1976), 1–8. The distinction in terms of input of labor has already been made by Wolf (1966), 20.

15 *Strategikon* XI 4, 372; transl., 120–21.

16 Litavrin (1987), 38–39. *Contra*: Curta (2001c), 316.



a response to frequent inroads by outsiders, especially Roman armies. At any rate, there is no way to decide whether the valuables hidden in “secret places” were in communal or private property. It is likely that such distinctions were irrelevant to the Roman military, who may have been interested in reading the *Strategikon*. By contrast, the author of Book 11 of the *Miracles of St. Demetrius*, which was written in the late 7th century, knew that every house left deserted in a Slavene village near Thessalonica contained reserves of corn, pulses, and utensils.<sup>17</sup> The implication is that exclusive ownership was restricted to households. Nothing is known, however, about land tenure.

Private property in the Empire is at least implied by the legislation adopted during the 6th century, particularly that against creditors, who, taking advantage of the hardships of the producers could go as far as confiscating lands as interest. Justinian’s novel 65 of 538 explicitly mentions the estates of the bishopric of Odessos, while an inscription from Sliven refers to a state or church estate (see chapter 3). One would expect a complex and overlapping dynamic between government (and church), community, and household (or individual) ownership in the Empire, but there is little, if any material evidence of exclusive ownership rights to land. By contrast, there is plenty of archaeological evidence of such rights in urban environments, e.g., in Chersonesus, where the fishing and fish-salting industry was a family business (see chapter 5). A 6th-century inscription from Corinth mentions a “teamster” (charioteer) named Euplous, who bought a grave from a “servant” (most likely churchman) named Anastasios for one and one half gold pieces, and received “full rights from him” as a consequence of that property transfer.<sup>18</sup> A fibula with bent stem discovered in Sucidava (now Izvoarele, Romania, not far from Silistra) is inscribed with the owner’s name in Greek (Marinos).<sup>19</sup> A golden, double finger-ring from a hoard found in Narona (now Vid, near Metković, in Croatia) bears the name Urbicius, most likely the owner.<sup>20</sup> Similarly, the many coins hoards found in

17 *Miracles of St. Demetrius* II 4.280, 220.

18 Walbank/Walbank (2006), 268. A miller named Artemon purchased the tomb in which was buried a woman named Photine, who died in 559; see Feissel/Philippidis-Braat (1985), 359.

19 Irimia (2005–2006). For a silver strap end bearing a monogram of the name Licinius, see Tóbiás (2011), 154 and 177.

20 Marović (2006), 239 and 248 pl. 1. For more finger-rings with personal inscriptions or monograms, see Repnikov (1906), 11 and pl. x1/2; Repnikov (1907), 111 and 145 fig. 95; Preda (1980), 95 and 164 pl. xxxiv/M.132.1; Sidorenko (1984), 329 with fig. 1/5; Uenze (1992), pls. 6/7; Veimarn/Aibabin (1993), 49 and 58; 48 fig. 29/19; 57 fig. 36/10, 11; Iordanov (1994), 22 and fig. 1; 23 fig. 2; Aibabin/Khairedinova (2000), 73 fig. 6/10; Ivanišević/Kazanski (2002), 127 and 149 pl. 1/1.4; Kostić (2003), 203–04 and 205 fig. 6; 209 and 208 fig. 9; Aibabin/Khairedinova (2009), 132 and pl. 174/15. For a few specimens found outside the Empire,

the Balkans (some of them including personal dress accessories) are most likely an indication of private ownership, even if restricted to the military (see chapter 3).

The only argument that could be made in favor of exclusive ownership to land is based on the archaeological evidence from Hungary: ditches and fences surrounding farmsteads (such as those discovered in Kölked), as well as the distribution of wells next to groups of sunken-featured buildings (see chapters 6 and 7).<sup>21</sup> There seems to be a strong correlation between the size (and composition) of households and the size of the smallholding.<sup>22</sup> Judging from the archaeological evidence, particularly the size of the houses excavated on settlement sites in East Central and Eastern Europe, the fields owned and cultivated by each family must have been small. Much like the evidence from the *Miracles of St. Demetrius*, the archaeological evidence from Hungary strongly suggests therefore that the key productive unit was the household, and that property rights were transmitted within the household.<sup>23</sup> This does not exclude the concomitant presence of common property, owned and regulated by the corporate group of the residential community of households, all deriving joint benefit from that resource. Indeed, the members of that community most likely matched different types of tenure to various resources. While retaining small fields under exclusive use rights, if not ownership, they concomitantly kept other resources under corporate control. It is therefore wrong to assume that extensive land use (and shifting farming) always implies the absence of private property of land.<sup>24</sup>

Some have claimed that in chiefdoms, privately owned, moveable objects of symbolic significance, such as female dress accessories, are typically manufactured by “attached” specialists (see chapter 18).<sup>25</sup> If so, then the work of goldsmiths is clearly attested by finds of pressing dies and occasional moulds in the Early Avar period, even though the direct evidence for production in the pre-Avar period (first two thirds of the 6th century) is relatively thin (see chapter 7).

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see Lipp (1886), pl. 11/5; Belošević (1965), 133 and pl. 111/2, 3; Stare (1980), 112 and pl. 60/12; Bolta (1981), 34 and pl. 10/11; Vinski (1989), 22, 30, 57 pl. VII1/3, 69 pl. XX/8, 70 pl. XXI/3; Bârză (2010), 359 pl. 81/9; Zhdrakov (2006); Komar/Khardaev (2012), 260 fig. 9/8.

21 It remains unclear whether the families who lived in fenced enclosures in Kölked were of peasants who owned more land than others in the village, as Wickham (2006), 429 has postulated for the (imaginary) village of Malling in Anglo-Saxon England.

22 Netting (1993), 101.

23 Netting (1993), 58–101.

24 Netting (1993), 172–73. In that respect, common property is not some kind of “quaint hold-over of socialistic traditional communities,” but a “careful adjustment of social rule and practices to ecological facts” [Netting (1993), 182].

25 Earle (1997), 155.

Nonetheless, there is supplementary evidence of exclusive ownership rights to moveable objects of symbolic significance, such as combs or bow fibulae with runic inscriptions attesting the identity (names) of the owners.<sup>26</sup> The same is true for the Baltic region, from which dress accessories are known with statements of personal property in the form of short runic inscriptions.<sup>27</sup> In both the Carpathian Basin and the Baltic region, as well as in the central region of Eastern Europe, weapon burials further indicate the existence of warrior elites with elaborate sets of fighting equipment, which may well correlate with emerging property rights, as raiding presumes forceful intervention to deprive another of asserted rights in everything from women to valued objects and staples.<sup>28</sup> Elsewhere in Eastern Europe, even in the absence of weapon burials, hoards of dress accessories (whether of bronze or of silver) strongly suggest private ownership of moveable objects (see chapter 12).<sup>29</sup> The same is true for marked objects that could be associated with ownership, such as the golden finger-rings with monogram from Malo Pereshchepyne (see chapter 13).<sup>30</sup>

It has been argued that in ecological niches where the intensification of agricultural production is not possible, territorial “collective” control is formed along ethnic divisions.<sup>31</sup> In other words, with groups whose subsistence economy is based on foraging or on slash-and-burn agriculture in marginal environments, territories are typically not marked and communal property of land is the rule, even though exclusive ownership rights may apply to moveable

26 Wimmer (1894); Bóna (1956), 196; pl. XLVII/1–2; pl. XLVIII/1–2; Cseh (1999a), 67–68; 68 fig. 8. See also Tóth (2012), 99–106. For a gold pin with the name of the owner (Bonosa), see Vida/Pásztor/Fóthi (2011), 440 and 420 pl. 2/6. For disc-brooches with inscriptions in Greek referring to the owner, see Papp (1963), 115–16; pl. 1/4; pl. XX; Preložnik (2008). Earle (2000), 53 notes that the marking of objects can be associated with ownership and associated rights and responsibilities.

27 Kulakov (1990), 69 and 111 pl. XVII/7; Hilberg (2009), 354–55; 579 pl. 3/15.

28 Earle (2000), 49. The argument is of course valid for other “barbarian” raiders, such as the Scлавenes who crossed to Lower Danube during the second half of the 6th and the early 7th century in order to plunder the Balkan provinces of the Empire. John of Ephesus describes the Scлавenes of the early 580s as becoming rich and acquiring from the Romans (through raiding) “gold and silver, herds of horses and a lot of weapons,” in sharp contrast to the “simple people” they used to be, who never dared to “leave the woods” (John of Ephesus, *Ecclesiastical History* VI 25, 249).

29 For a rare find of a fibula with property inscription in Greek letters, see Shramko, ‘Rann’oseredn’ovichne poseleennia’, pp. 76 and fig. 3/9; 77 fig. 4/1, 2.

30 The reading and interpretation of those monograms have been debated for some time. Irrespective of the meaning, the very existence of no less than three finger-rings with (similar) monograms is a clear indication of exclusive ownership rights. See Zhdrakov (2006); Rashev (2008); Jordanov (2016).

31 Stone/Downum (1999).

objects.<sup>32</sup> The evidence from East Central Europe between the 5th and the 7th centuries is not entirely consistent with such conclusions. On one hand, if slash-and-burn agriculture was practiced in Belarus and northwestern Russia during that time, then the material correlates of corporate groups are group cemeteries with so-called “long barrows” (see chapter 13). As many of those barrows contain multiple burials, each barrow probably represented the burial ground of a family or kin group. The form of property most likely associated with such groups was corporate, but the barrows provided a visible and permanent territorial statement by groups whose ancestors were interred in the landscape.<sup>33</sup> On the other hand, slash-and-burn agriculture was also practiced, most likely, in northern Estonia, where remains of fossil fields have been found (see chapter 11). Clearance cairns are undoubtedly markers of field cultivation, but they also served as field borders marking territory and property. Furthermore, there are clear archaeological indications of private property of moveable objects, with high symbolic value in the form of hoards of (Sassanian) silver from the taiga (see chapter 15). That, however, is a region of hunters (“foragers”), not of agriculturists. Was there any connection between the home range and the local camp?<sup>34</sup> It remains unclear whether the sites excavated in the taiga were permanent settlements or camps. No study exists of the catchment areas of those settlements. On the basis of ethnographic evidence, Roman Kovalev has advanced the idea of hunting patches, which could be located at a considerable distance (up to 300 km) from settlements, being hereditary and used only by males in the owner’s family.<sup>35</sup> There is yet no archaeological way to confirm that idea.

According to Timothy Earle, differential access to, as well as ownership of productive resources and moveable wealth is a defining feature of chiefdoms. Such societies are geared up for warfare, as indicated, among other things by fortified settlements. Can one therefore call “chiefdoms” those societies in the forest-steppe, forest, and taiga regions of Eastern Europe, in which strongholds have been built in the 6th or 7th century? Neither strongholds in the forest belt, nor those in the taiga could be regarded either as military sites or as “seats of power” for the local elites (see chapters 12–15). On the other hand, if war was

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32 Early (2000), 45. In such marginal environments of foraging as forests and mountains, “common-pool resources” are preferred to any exclusionary property rights; see Bayman/Sullivan III (2008).

33 Earle (2000), 43 and 52. The classic archaeological example of cemeteries used as markers of group identity and territory is that of O’Shea (1996), 362–67.

34 Early (2000), 45.

35 Kovalev (2000), 48–56. Property of hunting patches was marked by special signs cut on trees.

an overwhelming concern among the Sclavenes in the Lower Danube region, as clearly indicated in the written sources, how could that feature be a characteristic of a “peasant-mode society” for which there is no evidence of exclusive ownership rights to land? If labor estimated to make specific objects and the intensification represented by various landscape facilities (such as cairns) are an indirect measure of property, why are such indications more prominent farther away from the northern frontier of the Empire on the Danube (in Central Europe, as well as in Estonia) than in the lands immediately adjacent to that frontier? And if marginal ecologies that cannot be intensified require territorial “collective” control of the land, how can one explain the sharp social differentiation and inequality so clearly visible in at least some of the cemeteries excavated in the taiga? In East Central and Eastern Europe, the articulation of property rights to land is neither clearly visible in the archaeological record, nor directly responsible for social stratification. A resistant myth, communal property is neither archaeologically visible, nor consistent with the evidence of individual ownership rights.

## Subsistence Economy

Historians often use the word “subsistence” in a negative sense, as a primitive form of life or a low standard of living, in short as a description of desperate efforts to survive in conditions of poverty.<sup>1</sup> Others employ the term in reference to “primitive” societies of the past.<sup>2</sup> However, leaving evolutionary assumptions aside, a subsistence economy is in fact a “system whereby activities, procedures, organizations, and technologies are used by a human group to extract matter and energy from its environment.”<sup>3</sup> If so, then farming was definitely not the only subsistence form known in Eastern Europe during the 6th and 7th centuries. In the northern and northeastern parts of European Russia, foraging was most certainly an important, if not the main subsistence strategy.<sup>4</sup> However, other sites in the taiga (such as the stronghold at Oputiata) produced zooarchaeological evidence of cattle and horse breeding. Moreover, in the central parts of Eastern Europe, ancillary cultivators organized the cultivation of such crops as barley and emmer around foraging.<sup>5</sup> On the other hand, the increasing evidence of wild animals in faunal assemblages in the Baltic region and in northwestern Russia is an indication of commodification, not hunting for subsistence. With the exception of beaver, most other

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- 1 Kuokkanen (2011), 219. Wickham (2006), 698 sets the subsistence of peasants in sharp contrast to agrarian specialization. Peasants “cannot afford to make mistakes” and their subsistence economy must therefore have been mixed, “with a single peasant family producing as many of its food needs as possible.” For a similar argument, see McCormick (2001), 35; Halsall (2007), 144.
  - 2 To Wickham (2006), 261 and 386, “subsistence” is what peasants in the Middle Ages did—“cultivating largely for subsistence.” That cannot be true, though, as even hunter-herders in northern Scandinavia practiced cereal cultivation after ca. 800; see Bergman/Hörnberg (2015). Moreover, there are ethnographic cases of societies moving from an agricultural to a predominantly hunting and gathering base and then, following large-scale faunal depletions, back towards agriculture; see Walter/Smith/Jacomb (2006).
  - 3 Earle (1980), 1. Wolf (1966), 19 writes of “paleotechnic ecotypes”—systems of “energy transfers from the environment to man.”
  - 4 Reindeer herding in the northeastern and northern parts of European Russia is a relatively recent phenomenon. There is no archaeological evidence of reindeer herding for the early Middle Ages.
  - 5 For the phrase “ancillary cultivation,” see Freeman (2012), 3013. Most ancillary cultivators acquire surplus crops through exchange or raid for consumption, which nicely dovetails with the archaeological evidence of trade and military posturing from cemeteries of the Riazan'-Oka group.

animals identified by zooarchaeologists were a poor source of food, but a valuable source of fur. Sites such as Vis 2 in the Komi Republic, on which there are abundant remains of fur game, cannot be associated either with foraging, or with farming communities.<sup>6</sup> Moreover, they seem to indicate a certain degree of specialization, most visible in the numerous arrows with blunt tips.<sup>7</sup> Neither the prominence of fur game remains, nor the archaeological evidence of specialization can square with the idea of a “peasant mode of production” which involves agriculture. The subsistence economy of the northern and northeastern regions of Eastern Europe is also strongly associated with fishing, as abundantly documented by the archaeological finds from Vis 2. That most sites excavated in the Komi Republic and the neighboring regions of Russia are settlements, not camps speaks volume about the positive association between reliance on fishing and permanence of settlement.<sup>8</sup>

Elsewhere, the evidence of subsistence farming is thin for different reasons. The cultivation of crops is mentioned in the written sources in relation to the hinterland of some Balkan cities (such as Singidunum and Thessalonica), and documented by means of paleobotany on rural sites in Greece, such as Pyrgouthi (see chapter 3). The southern Balkan provinces certainly produced an agricultural surplus meant for commercialization. There is also evidence in Greece of “promiscuous” cultivation, with grain between olive trees and vines.<sup>9</sup> However, in the central and northern Balkans, the results of paleobotanical analyses from both cities (Caričin Grad) and forts (Gamzigrad, Svetinja) strongly suggest that the supplies of corn came from the outside, most likely as shipments of *annona*. The only archaeological evidence of subsistence economy on hillfort sites in the northern Balkans are hoards of agricultural implements, all of which point to horticulture or cultivation on small plots. *Pace* Sarantis, we can rule out larger-scale agricultural activity.<sup>10</sup> That “subsistence”

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6 Zvelebil (1992), 14.

7 No detailed analyses are known for the faunal material from Vis 2 and other similar sites, but another “signature” of specialization is the frequency of metapodial fractures on beaver bones. That all distal ends were broken off suggests that beavers were hunted primarily for pelts, and that pelts were removed from the carcass by methods that are still in use; Zvelebil (1992), 15.

8 Norstedt/Östlund (2016), 30.

9 The phrase “promiscuous’ cultivation” is from Wickham (2006), 272 with n. 25.

10 Sarantis (2016), 208. Sarantis (2019), 363 believes that, despite the disappearance of the villa economy, “most Balkan provinces were largely self-sufficient, at least in cereals,” but offers no proof of production. Similarly, Poulter (2019), 3 is convinced that farming at Dichin was carried out by “soldier/farmers who occupied the fort.” At a closer examination, however, the paleobotanical evidence from that site indicates *storage*, but not production of cereals. There is absolutely no evidence of farming from the last occupation

in the negative sense commonly employed by historians best describes the situation in the northern Balkans during the 6th century results also from the analysis of a few assemblages of faunal remains. Not only is the number of wild animals large—an indication of hunting as a source of meat procurement—but among domesticated species, sheep and goats dominate. Pastoral groups typically keep sheep and goats as a strategy of high-risk-high profit, for sheep and goat flocks grow fast (doubling within three to five years), even though the yearly mortality remains high (25 percent or more).<sup>11</sup> It is difficult to imagine those living in 6th-century hillforts of the northern Balkan region as practicing pastoralism, but there can be no doubt about the role of those animals for secondary products, not for meat.

The contrast with the regions immediately to the north (either those in the “shadow of the Empire” or those inhabited by Roman clients) is stark. Contemporary authors with military experience in the field knew that those regions were rich in “all sorts of livestock and produce.”<sup>12</sup> Subsistence farming in the southern and eastern regions of present-day Romania was based on “itinerant agriculture,” a system in which cultivable land was divided into two or more sectors, which were planted for two or three years, and then left to fallow for three to four years.<sup>13</sup> The abundance of archaeological and paleobotanical evidence pertaining to the cultivation of crops contrasts with the lack of any signs of crop cultivation on any significant scale on the other side of the Lower Danube, in the northern Balkans. The only plowshare known so far from Southeastern Europe and securely dated to the 6th century is a relatively small specimen of Henning’s class A 3. The small size indicates that the field(s) on which the tool was used were also small, which in turn suggests that the field work was handled by a household unit—a family.<sup>14</sup> Nothing is known about intensification or yields, but it has been suggested that in areas with short vegetation period, fields tend to be small per person with high intensity and high yields.<sup>15</sup> The evidence of viticulture in the lands next to the northern frontier of the Empire—both Walachia (southern Romania) and western Hungary—bespeaks specialization, although it is not at all clear what was the purpose of that production.

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phase at Dichin. Sarantis (2016), 210 still hopes that with more archaeological research, “our view of the situation is likely to change further.”

11 Ebersbach (2010), 165.

12 *Strategikon* XI 4, 372; transl., 120.

13 Wolf (1966), 20 called it “sectorial fallowing system.”

14 Netting (1993), 101; Earle (2000), 46.

15 Ebersbach (2010), 162.



The contrast with the regions on the opposite side of the Avar qaganate, to the northwest, is evident. On sites in central Bohemia, there is clear evidence of intensified agriculture, but no evidence of specialization. There is also a much greater emphasis on pigs for meat procurement, with both cattle and sheep playing a secondary role. Even starker is the contrast between faunal assemblages in the Roman Balkans, which are dominated by sheep and goats, and those in the barbarian lands north of the Lower Danube or in the Carpathian Basin, which are dominated by cattle. However, much like sheep and goats in the Balkans, cattle in the regions adjacent to the northern frontier of the Empire were raised primarily for dairy, not for meat.<sup>16</sup> Meat was procured from pigs and fowl, of which there is clear evidence on both settlement and cemetery sites in the Carpathian Basin. There were of course many other reasons for keeping large animals, as cattle served as a “mutual saving bank,” for risk minimization, part of feasts, marriages (as bride price), or alliances (as gifts and counter-gifts). Procopius mentions that the Sclavenes in the region next to the Lower Danube sacrifice cattle to their god, the maker of lightning.<sup>17</sup> How large were herds of cattle in the barbarian lands adjacent to the Empire? No studies have so far attempted to gauge the size of the livestock in local communities. However, ethnographic parallels suggest that the minimum size for stable demographic conditions is between 30 and 50 animals, and the average grazing area of a cow is a circle with a radius of 8 to 12 km a day.<sup>18</sup> It is important to note that while land rights are often habitual rights, in that the (family) unit that clears the land also “owns” it as long as it is in use, animals are never shared with neighbors or members of other communities.<sup>19</sup> Pooling, however, could be of animals in a herd, of use rights in animals, and of grazing grounds.<sup>20</sup> In other words, the presence of cattle in relatively large number in

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16 Another similarity in the subsistence economic profiles of the regions north and south of the Lower Danube is the presence in faunal assemblages of wild animals (such as deer or boar), which were hunted for meat. There is absolutely no evidence of fur-bearing animals in bone assemblages of Southeastern Europe.

17 Procopius of Caesarea, *Wars* VII 14.23, 270; transl., 408. This does not of course imply taking Procopius’ testimony about Slavic religion at face value. For the “maker of lightning” as a “typically Christian ‘monotheistic’ interpretation of primitive religions,” if not Procopius’ fabrication, see Kalik/Uchitel (2018), 31. See also Loma (2004).

18 Ebersbach (2010), 163. In cattle herds, between three and five percent of cows are infertile, and the average yearly loss of animals because of natural reasons can be as high as 15 percent.

19 Ebersbach (2010), 176–77.

20 Ebersbach (2010), 178, who notes that reciprocity and pooling are important patterns in farming societies.

the lands adjacent to the northern frontier of the Empire is a strong argument against the idea of communal property (see Chapter 16).

There was no shortage of pastoral or arable land in Eastern Europe during the 6th and the 7th centuries, and as a consequence, subsistence farming in this part of the continent was clearly of the so-called “open” system, in which the only limiting factors are labor and its distribution over the year.<sup>21</sup> Cultivation of crops was just as successful in the forest-steppe region of Eastern Europe as it was in the lands next to the northern frontier of the Empire. However, no plowshares and no hoes are known from the forest-steppe region. Ukrainian archaeologists therefore believe that the subsistence form favored there was the long-term fallowing system.<sup>22</sup> Known also as “swidden cultivation,” this system was associated with clearing by fire and cultivation with the hoe.<sup>23</sup> However, there is no evidence of slash-and-burn agriculture in the forest-steppe zone, and the paleobotanical evidence from the western parts of the forest zone (now within Ukraine, Belarus, and northwestern Russia) is equally problematic.<sup>24</sup> A strong argument against the existence of swidden cultivation, which is typically associated with scattered population of low density, is the prominent presence of cattle bones in faunal assemblages of both the western and the eastern parts of the forest-steppe region. Unlike the lands next to the northern frontier of the Empire in present-day Romania and Hungary, the cattle in the Middle Volga region seem to have been raised for meat, not dairy. However, meat was also procured from horses and (domestic) fowl, the evidence of which in that region is just as significant as in the Carpathian Basin. Much like in the lands by the Lower Danube, hunting was a secondary source of food.

There has been much emphasis placed on technology, as a distinction is often drawn between systems based on hoe (or digging stick) and those based on plow drawn by draught animals. Some have even proposed that technologies based on hoe were conducive to egalitarian social relations, while those

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21 As opposed to both “closed” (with shortage of pastoral land, and low animal densities) and “maximal” (with shortage of arable land, and short vegetation period) systems; see Ebersbach (2010), 161–62. Wolf (1966), 30–31 notes that “Eurasian grainfarming” (short-term fallowing systems) is typically associated with livestock raising, for it is suitable for areas with abundance of arable land, but with shortage of labor (because of low population numbers or low absolute population) and a short growing season.

22 Timoshchuk (1995), 133. For the forest zone in modern Belarus, see Shmidt (1972), 66–68.

23 Wolf (1966), 20. As an adjective, “swidden” refers to slash-and-burn agriculture and is a dialect word from Yorkshire readopted as a technical term (sometimes used as a verb as well).

24 For a critique of the attempt to read slash-and-burn agriculture in pollen spectra, see Rowley-Conwy (1981), 85–88.

based on the plow provided the basis for more hierarchical social relations.<sup>25</sup> However, the archaeological evidence contradicts such a simplistic interpretation derived from technological determinism. In both the Baltic region and the central parts of Russia, the only areas of Eastern Europe in which hoes were deposited in 6th- to 7th-century graves, social differentiation is amply documented in burial customs and grave goods. Both areas have also produced incontrovertible evidence of slash-and-burn agriculture. There are more pollen samples analyzed in Estonia than in central Russia, but they do indicate a relatively rapid expansion of swidden cultivation, which coincides with the introduction of rye as a main crop in the region. How could this transformation be explained? Why was slash-and-burn agriculture suddenly becoming so prominent in the local subsistence economy? What prompted the change? Scholars commonly apply the term “agricultural intensification” to qualitative changes associated with permanent cultivation and meant to increase agricultural production per unit of inputs (labor, land, time, fertilizer, seed, or feed). Intensive techniques, such as the irrigation, can lead to dramatic production gains, even though they require more labor. In that respect, swidden systems are regarded as the exact opposite of intensified agriculture.<sup>26</sup> On the other hand, many believe that the primary cause of agrarian development is population pressure. In Estonia, however, there is no sign of a sudden explosion of population.<sup>27</sup> In the absence of a demographic explanation, social-economic pressure is the likely alternative. Despite claims to the contrary, the slash-and-burn agriculture practiced in Estonia coincides in time with remarkable signs of the rise of new social elites. Within one and the same sub-region of northern Estonia, accelerated swidden cultivation, lavish burials (some with weapons), and hoards of silver ornaments bespeak a social and economic nexus that has not yet been sufficiently explored. It is quite possible that the introduction of rye cultivation was a strategy to maintain control over a relatively small population within an increasingly ranked society. Although no detailed data are so far available for central Russia, the presence in that region of both hillforts and

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25 Goody (1976), 23–25.

26 Wickham (2006), 538 insists that “the number of hours a peasant household works is lowest for long-fallow systems like slash-and-burn agriculture, rather more if plow agriculture has been developed.” At least one variable seems to be ignored in that statement—soil fertility.

27 On the contrary, as Tvauri (2012), 308 puts it, “it is especially difficult to find any sites ... that could be dated to the second half of the 6th and the first half of the 7th century” in Estonia. In northeastern Lithuania, there is notable decrease in human activity (and, presumably, population) during the 6th century; see Stančikaitė/Kisieliene/Strimaitienė (2004), 27.

cemeteries with lavishly furnished burials (some with weapons) invites comparison with the Baltic region. Slash-and-burn agriculture in central Russia is indirectly documented by finds of axes, but there are no palynological studies of the impact of human activity on the environment to confirm hypotheses drawn from the archaeological data. Nonetheless, it is tempting to associate the rise of local elites in the central region of Russia with accelerated swidden systems. In early medieval Eastern Europe, the hoe was definitely not conducive to egalitarian social relations.

## Crafts and Craft Specialization

Archaeologists in Eastern Europe have paid much attention to crafting and craft specialization in the early Middle Ages. However, they have rarely, if ever tackled the role of craft production in the political economy of local societies.<sup>1</sup> Instead, their efforts have been typically directed towards the identification of workshops. The obsessive preoccupation with that topic seems to be related to a chain of hypothetical arguments, involving at least three unwarranted assumptions. Because there is evidence of craft production, that production must have taken place in a special area—a workshop. This implies that specialist producers operated within society. Since those were full-time specialists, there must have been sufficient division of labor within the society, or production of surplus within that society, to feed the specialists who were involved in crafting.<sup>2</sup> However, in most cases, the archaeological evidence from Eastern Europe pertaining to the 6th and 7th centuries does not indicate such a division of labor. In the Carpathian Basin, the Lower Danube region, and the forest-steppe and forest belts of Eastern Europe, bone and antler processing, as well as weaving were household-based activities, with no separate facilities. The same is true for the manufacture of jewelry and dress accessories. There was an abundance of ceramic material in the sunken-floored building in Bernashivka that produced 68 soapstone moulds. In other words, that was not a workshop, but a dwelling, in which food was prepared as in any other household unit of the same settlement. That the assemblage also included spindle whorls strongly suggests multicrafting, a conclusion substantiated by the analysis of tools deposited in Avar-age graves—some for black-, others for goldsmithing or carpentry.<sup>3</sup> This is in sharp contrast to the situation in such

1 For a notable exception, see Šnĕ (2006), 71–73.

2 Frondzhulo (1968); Aulikh (1969); Bejan (1976); Olteanu (1978); Arkhipov (1979); Henning (1987); Gomolka-Fuchs (1987); Khavliuk (1988); Vynokur/Megei (1992); Teodor (1993); Vynokur (1998); Teodor (1996); Mare (2005); Teodor (2006); Shcheglova (2008); Ivanišević/Stamenković (2010); Dumanov (2012); Horváth (2012); Ivanišević (2018); Marković/Stamenković (2016). For an early critique of the assumptions involved in that chain of arguments, see Welbourn (1985). For more recent, cautionary notes, see Shcheglova (2006); Ciupercă (2011).

3 The term “multicrafting” refers to “the same or closely related artisans performing a major part of the entirety of two or more distinct crafts involving different raw materials in close proximity to each other to produce items primarily for ‘supra-household consumption’”; see Shimada (2007), 5.

cities as Thessalonica or Chersonesus, where true workshops specializing in individual crafts—weaving, tanning, or glassmaking—co-existed side by side, yet independently. Workshops in Thessalonica or Chersonesus were demarcated indoor and outdoor spaces where a major portion, if not the entirety of the production took place on a regular basis. Although planted in the middle of the city, workshops were clearly different and separated from domestic areas.<sup>4</sup> Such a nucleation of specialists was a direct consequence of the existence of regular markets, which allowed producers to cut on transport and risk costs and brought them closer to consumers.<sup>5</sup> Those were craftsmen and -women who withdrew themselves from some or all of the subsistence activities, and they obtained their subsistence goods by means of exchange for their craft products, on the basis of the same regular markets.<sup>6</sup> By contrast, specialists in the lands north of the river Danube do not seem to have been divorced from subsistence activities, and may very well have worked only part-time or “on the side.” This was small-scale, independent production for local consumption.<sup>7</sup> For a household in *barbaricum* to be compared to a workshop such as those known from Thessalonica or Chersonesus, it had to produce only some of the goods it consumed, and its production activities to be in some way regularized and predictable.<sup>8</sup>

The conditions that permitted the development of independent specialists must have been primarily economic: some member of the household had sufficient time to produce items needed for other members of the same household or for neighbors in the same settlement. So far, there is no indication that the products of such activities moved beyond the household, and no indication of exchange with other communities presumably producing for subsistence. That in most excavated settlements, only a limited number of households (often only one) were involved in crafting has in fact encouraged speculations about the specialists in question being not locals, but itinerant artisans. The idea was first put forward by the German archaeologist Joachim Werner, as a way

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4 That is precisely why the idea of workshops inside the postern of the Upper City or the south-eastern tower of the Lower City in Caričin Grad cannot be accepted; see Ivanišević (2018), 712; Ivanišević/Stamenković (2010), 41–42.

5 Costin (1991), 15.

6 Evans (1978), 115.

7 That metal bindings of drinking horns found in Plinkagalīs and Pašušvys may have been produced by the same specialist does not mean that that specialist produced for a market, as drinking horns may have moved from one location to the other by means of exchanges (such as gift giving between elites) that have nothing to do with production. The same explanation applies to the extraordinary match between some of the dies found in Felnac and the strap ends discovered in Sânpetru German.

8 Costin (1991), 4.

to explain the dissemination of forms and ornamental details on display on early medieval metalwork, such as fibulae and buckles.<sup>9</sup> However, the model of the itinerant artisan has recently been rejected as neither documented in early medieval sources (despite Werner's claims to the contrary), nor supported by the archaeological evidence.<sup>10</sup> The multiple components of the Kuzebaev hoard, for which most analogies have been in Central Asia, may well be interpreted as an indication of long-distance contacts or even exchange, but not of itinerancy.

Both the workshop and the itinerant artisan models highlight the tendency to study production primarily as a way to understand the mode of exchange. When applied to areas of East Central and Eastern Europe outside the territories of the Empire, those models are meant to account for the presence in the archaeological record of artifacts that may be regarded as unusual or outright exotic. Because they have been found together with debris, scrap metal, or other indications of local production, such artifacts cannot be explained in terms of "imports." As a consequence, the tendency is to attribute their production to extraneous circumstances, such as the importation of technology. Such an approach neglects, however, the fundamental question of production. Whether foreign ("itinerant") or local, specialized production is different from non-specialized production in ways that have rarely, if ever been tackled by archaeologists interested in crafts: "the amount of time spent in activity, the proportion of subsistence obtained from the activity, the presence of a recognized title, name or office for the person or activity, and the payment in money or in kind for the products of the specialist."<sup>11</sup> Despite the occasional use of experimental archaeology,<sup>12</sup> the question of how much time a specialist spent

9 Werner (1961), 313; Werner (1970), 70. The inspiration for Werner's idea must have been Vere Gordon Childe's idea of the Bronze-Age, inventive craftsmen, free of the control of kings, priests, and bureaucracy, working on demand and enjoying high status; see Childe (1930), 4–11 and 44; Childe (1939), 113–17; Childe (1958), 169–70. Childe's idea is now regarded as wrong, for "contrary to Childe's caricature of them ..., there is no literary evidence for craft specialists having been itinerant, and there are many grounds for doubting this supposition *prima facie*"; see Gibson (1996), 115. There has been no attempt to re-evaluate Werner's thesis in the light of the evidence pertaining to the early Middle Ages. On the contrary, the idea of itinerant artisans is still very popular in East Central and Eastern Europe. See Comşa (1975), 189; Turčan (1984), 484; Čilinská (1986), 281 and 283; Teodor (1996), 105; Teodor (2006), 190; Tănase (2010), 194–99; Rácz (2014), 20–21.

10 Ashby (2015), 15 and 25 fig. 2.2; Ježek (2015), 122. Nonetheless, Wickham (2006), 702 still believes that "artisans were sometimes itinerant."

11 Costin (1991), 3.

12 Peets (1991), 97; Gallina (2018), 426 and 429. Most archaeological experiments are interested in measuring productivity, and therefore focus on the yield, not on the time spent on the task; see Pleiner (1969); Souchopová (1980). This is in sharp contrast to archaeological

on average for any particular craft remains unanswered. Equally elusive are the answers to the other questions regarding the proportion of subsistence and the payment for the specialist. Nonetheless, inscriptions from Thessalonica, Odessos, Edessa, Athens, and Salona indicate that weavers, tanners, cloth carders, furriers, and glassworkers were recognized as specialists and that their activities were sufficiently important to become an identity marker in epitaphs. Those may not have been rich people, but their families were sufficiently well-to-do to buy grave plots in the cemetery and have inscriptions carved for their tombs. Those were families that must have been involved in the respective craft production. That, at least, is the conclusion drawn from the existing evidence about the organization of the fish-salting industry in Chersonesus.

By contrast, nothing is known about the identity of the independent specialists in the settlements on the other side of the river Danube. Were they free members of the family, or individuals (such as captives) in some servile condition working for that family? In a few cases (such as Bernashivka), the associated finds (such as amphora shards or coins) suggest that the occupants of the building had privileged access to goods from the empire. This may be further interpreted as an indication that crafting was practiced in that building on behalf of a prominent, possibly elite family of the community. Some have advanced the idea that the goldsmiths in the central part of the forest belt in Eastern Europe were female, not male members of the community. Another possibility is that they were members of the elite. That much results from the careful analysis of burial assemblages with tools, such those found in Brno, Poysdorf, or Band. The presence of weapons and trading implements strongly suggest high status, as do forms of elaborate burial, such as funerary constructions on top of the grave pit. Whether or not those buried in Brno, Poysdorf, or Band were themselves gold- and blacksmiths, in the Carpathian Basin during the 6th and early 7th century, high status could be associated with craft production in reference to one and the same individual. The evidence, in other words, is sufficiently strong to advance the idea that the members of elite themselves produced some classes of objects in chiefdom societies.<sup>13</sup> Such a form of crafting is now known as “embedded production.”<sup>14</sup>

The main criterion for distinguishing “embedded production” from other forms of organizing craft production is that the artisans are elite household members. There is, however, another angle from which craft production may

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experiments targeting such activities as house building or food preparation, which place a lot of emphasis on timing activities; see Pleinerová (1986); Pleinerová/Neustupný (1987).

13 Costin (2001), 299.

14 Ames (1995).



be studied, namely that of the consumer. In that respect, “embedded production” is different from independent production, because the latter is essentially production of utilitarian goods for broad distribution. The key element in that distinction is the definition of craft specialization as “a differentiated, regularized, permanent, and perhaps institutionalized production system in which producers depend on extra-household exchange relationships at least in part for their livelihood, and *consumers depend on them for acquisition of goods they do not produce themselves*” (emphasis added).<sup>15</sup> In that sense, “embedded production,” at least theoretically, is still production for one’s own household, as opposed to production for others (“suprahousehold production”). As John Clark put it, in order to understand craft specialization, one needs theories of social exchange and interaction, production, and “the role of created objects.”<sup>16</sup> It is precisely at this juncture that research on early medieval craft production in East Central and Eastern Europe seems to have missed the point.

Archaeologists dealing with craft production distinguish between “independent production” of ordinary goods for non-elite consumers and “attached production” of special, high-value goods for elite consumption.<sup>17</sup> Attached production occurs when decisions about production are taken by individuals outside the production unit (the household).<sup>18</sup> That may well have been the idea behind Maria Comşa’s associating finds of 6th-century moulds for casting dress accessories and crosses with chiefdoms.<sup>19</sup> Attached artisans typically produce goods with “extrinsic, extra-utilitarian function that can be exploited only by a subset of the population.”<sup>20</sup> However, the context of production in the case of the mould finds does not indicate who was empowered to make decisions about the means of production (particularly choices of raw materials, tools, and techniques), the organization of labor (labor intensity and task allocation), the particular style of the objects produced, or the ways in which they were to be distributed. Attempts to connect “power centers” (chieftain residences) with finds of moulds result in a vicious circle. Casting moulds

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15 Costin (1991), 4. Clark/Parry (1990), 297 offer a shorter definition that places a greater emphasis on the consumer: “production of alienable, durable goods for non-dependent consumption.”

16 Clark (1995), 291.

17 Brumfiel/Earle (1987), 5–6.

18 Costin (2001), 298.

19 Comşa (1978), 112. Comşa believed that at least some of those attached artisans were captives taken by the Slavs from the Empire.

20 Costin (2001), 298.

signal attached specialists, as they were found on sites that may be interpreted as elite residences because of finds of moulds.<sup>21</sup>

Hački, in eastern Poland, and Terekhovo, in central Russia were both strongholds, but nothing indicates that they were elite sites. The ladle, stone moulds, engraving tools, pressing die, and the small hammer found there cannot therefore be interpreted as evidence of attached artisans. Nor can the archaeological or production context of the evidence of casting and snarling found in Caričin Grad and on a number of military sites in the Balkans be in any way interpreted in reference to attached production, even though it clearly indicates specialization.<sup>22</sup> A similar conclusion results from the careful examination of the context of production for combs on such sites in the Carpathian Basin as Biharea and Tiszafüred or for bronze artifacts on sites farther to the northwest, at Považany, Věrovany and Pavlov. In other words, in all those cases, the most appropriate model is of community specialization (autonomous individuals or households aggregated within single communities and producing for unrestricted regional consumption), not individual retainers (artisans working full-time for elite patrons) or nucleated *corvée* (part-time labor in special-purpose, elite settings or facilities).<sup>23</sup>

Unrestricted local consumption may have also been on the minds of the potters operating the specialized kilns found on a number of fortified sites in the northern Balkans, as well as on open, settlement sites farther to the north, such as Bucharest-Dămăroaia and Dulceanca, in the Lower Danube region, as well as Bratei, Dipşa, Szelevény and Törökszentmiklós, in the Carpathian Basin. Judging from the location of kilns inside their respective settlements, those were specialized workshops, which produced for unrestricted regional consumption. Unfortunately, no extensive study based on ceramic fabric analysis has so far been carried out in order to establish the size of that region of consumption.<sup>24</sup> However, studies based on the traditional morphological

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21 For a similar line of reasoning, see Măgureanu (2010).

22 Flad/Hruby (2007), 2: “according to the broadest definition, specialization is simply production that leads to exchange, thereby integrating the society in which it occurs.”

23 For the notions of “community specialization,” “individual retainers,” and “nucleated *corvée*,” see Costin (1991), 9. “Retainer workshops” (large-scale operation with full-time artisans working for the elite within a segregated, highly specialized setting or facility) may be identified in the case of the glassmaking workshops in Louloudies, most likely an episcopal site; see Marki (1997); Angelkou (2004); Marki/Angelkou/Cheimonopoulou (2010). Meanwhile, nothing is known about the social organization of production in glassmaking and metallurgical workshops in Thessalonica.

24 Ceramic fabric analysis has been employed so far only to explore continuity of technological solutions on the same sites or within the same region, e.g., Fazioli (2014). On the other hand, studies based on provenance analysis focused on the relation between fabrics

analysis, as well as on volume measurements suggest that in what is now southern Romania each settlement community produced its own pottery, with little, if any ceramic material moving from one site to the other.<sup>25</sup>

A completely different picture emerges from the close examination of Avar-age pottery production in the Carpathian Basin. The ceramic production centers discovered in Szekszárd, Ócsény, and Dunaújváros were most likely operating on a large scale, with full-time artisans working for the Avar elites. The mechanisms for the distribution of the wheel-made pottery produced during the Early Avar age in the Carpathian Basin are far from clear, but scholars assume that the kilns discovered on those sites “enabled production on a large scale, and also ‘paid off’ through the profit achieved by pottery production.”<sup>26</sup> That all three centers were in close proximity to each other strongly suggests nucleation of production, which was quite possibly attached. Attached producers, in this case, must have been nucleated because they worked for patrons living nearby, although no central places of the Avar qaganate have yet been identified.<sup>27</sup> Whether the potters working in Szekszárd, Ócsény, and Dunaújváros were free or dependent, there can be no doubt about specialization. Nonetheless, it remains unclear why Avar elites chose ceramic specialization as attached production, for that does not seem to have been a particularly useful strategy for creating and controlling wealth, nor a very efficient method to acquire and maintain power and authority. It may well be that the target was in fact not the pottery in question, but the beverages or liquids stored and served in that pottery that were appropriated or that constituted the prestige goods to which the elites wanted to obtain greater or exclusive access. If so, the economic intensification that turned making wheel-made pottery into specialized, attached production may have been the product of ritual elaboration and participation.<sup>28</sup> The wheel-made pottery produced by attached specialists may thus have indirectly become an “enclave commodity”: although potentially alienable, its mobility was restricted. Avar elites may

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and local sources of clay and/or temper, e.g., Damjanović et al. (2014). The regional distribution of pottery from production centers in Greece results from provenance analysis of selected shards; see Vionis (2017), 360–61.

25 Teodor (2000), 319; Teodor (2005), 220. For similar conclusions drawn on the basis of later materials from neighboring sites in Lower Austria, see Herold (2009). For regional patterns of pottery technology in the Middle Volga region, see Salugina (1988).

26 Herold (2014), 225.

27 For the question of power center(s) during the Early Avar age, see Kiss (1988); Vida (2016b), 256. Attached production may also be surmised in the case of the ceramic production center in Kantserka, although no power center has been identified in its vicinity either.

28 Spielmann (2002), 202. Next to nothing is known about Avar feasting.

have used such a restricted class of pottery, but especially the beverages or liquids associated with it, to solidify their privileged position.<sup>29</sup> By contrast, the production of those goods that, by virtue of being more ornate and therefore requiring more labor, could be used in competitive displays and forms of exchanges was not attached. Despite many attempts, no “workshops” have so far been identified, which could have been responsible for the production of any of the luxury dress accessories or belt fittings known from Early Avar-age burial assemblage.<sup>30</sup> According to advocates of the “prestige goods theory” that emphasizes craft production as an economic resource employed in elite domination strategies, elites patronize crafts that use imported raw materials, in addition to high skills.<sup>31</sup> Many prestige goods produced in the Carpathian Basin during the Avar age were made of gold, quite possibly of melted solidi from the tribute that the Avars received from the Empire.<sup>32</sup> While such goods typically appear in burial assemblages associated with the Avar elites, the idea that those elites sponsored production in order to gain exclusive access to prestige goods or power and legitimacy is a relatively common assumption, not a conclusion resulting from the archaeological evidence.<sup>33</sup>

Specialization has often been associated with the rise of complex society. According to some, specialization is actually the cause of complexity, but others see it rather as a diagnostic of complex forms of social and political organization.<sup>34</sup> Weaving is perhaps the best example in East Central Europe of that articulation between specialized craft production and social complexity. While finds of loom weights in forts and among grave goods found in the Balkans suggest a household industry, the weaving sheds from Morești, Balatonlelle, and Rákóczifalva signal part- or full-time artisans working in special-purpose facilities, most likely for elite consumption. That two of the three weaving sheds found in Rákóczifalva were located away from other domestic spaces, but next to features with ovens that may have also been used for craft production is a

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29 Flad/Hruby (2007), 10. Vida (1999), 51 notes that the distribution of two subspecies of Gray Ware (his groups 1 B1 and 1B2/a–e) was restricted to a small area in eastern Pannonia.

30 For the attempt to identify Avar-age workshops, see Stadler (1990) and Stadler (1996). Equally surprising is the lack of any evidence of attached specialists involved in the production of the so-called “Slavic” bow fibulae, another class of prestige goods that has been linked to the rise of elites in the Lower Danube region and other parts of Eastern Europe; see Curta (2012), 291 and 293.

31 Schortman/Urban (2004), 191.

32 Bóna (1990), 115 and 117; Pohl, (2018), 232–33. Flad/Hruby (2007), 11 note that it is the use of prestige goods, and not necessarily their inherent qualities that make them prestigious.

33 For prestige goods and elites, see Costin (2001), 307.

34 Costin (2001), 274. Costin, (1991), 12 notes that attached specialization appears to evolve along with social inequality.

clear indication of separate activity areas, where labor could be monitored and controlled. Much like the Early Avar-age potters involved in the production of wheel-made ceramics, weavers in the 6th-century Carpathian Basin were attached specialists. Nothing is known about the intensity of their labor, which makes it impossible to decide if the archaeological record in this case should be interpreted as nucleated *corvée* (part-time labor for elites) or retainer workshop (full-time artisans engaged in a large-scale operation). Nonetheless, it is remarkable that the only region in Eastern Europe in which pottery making and weaving became forms of production with attached specialists is the Carpathian Basin. Elsewhere, it was ironworking.

Some evidence of smelting is known from the Carpathian Basin (Sighișoara), but the most impressive sites are those of the Middle Volga region—Karmaly, Maklasheevka, Rozhdestveno, and Shigony. In all four cases, furnaces were found in the proximity of strongholds, some of which produced clear evidence of the prestige goods and of accumulation of food reserves, perhaps in the form of tribute paid to elites inside the strongholds. As inside each one of them, only a few dwellings have been found, it is possible that the smelting furnaces nearby operated as nucleated *corvée*, with attached specialists working part-time, perhaps on a seasonal basis, but actually residing elsewhere. Moreover, that local elites may have controlled the production and distribution of iron results indirectly from finds of axe-shaped ingots of standard size and weight. A very similar situation has been documented archaeologically for the lands farther to the east, at the southern border of the taiga. The smelting and ironworking facilities found at Oputiata were all located on the northern side of the stronghold, while the dwellings of the artisans were located on the southern side. However, unlike the strongholds in the Middle Volga region, Oputiata does not seem to have been an elite site, but rather an industrial center, whether craft production was a seasonal or permanent activity. The same may be also true about the blacksmithing site at Butrint in Albania, as well as the much later smelting site discovered in Haivoron, on the Middle Bug in Ukraine. In all three cases, it is not known for whom those supposedly attached artisans actually worked, and where the respective elites may have been located. Specialization, however, is beyond doubt in all those cases, as neither smelters nor blacksmiths were involved in any subsistence activities on the site. They must therefore have obtained their subsistence goods through some kind of exchange for their craft products.

The same is true for the smelters in settlements of the Lower Danube region (Bucharest-Lunca-Bârzești, Budureasca, and Șirna), and of Belarus (Sniadzin), despite the presence of local pottery—both hand- and wheel-made—in those settlement features that had furnaces. Moreover, the furnaces discovered in

Șirna (both those of the earlier settlement phase dated between the mid-5th and the early 6th century, and those dated later to the 6th and 7th century) were in proximity of domestic spaces, which strongly suggests a part-time activity and small-scale, independent production. Neither in Bucharest-Lunca-Bârzești, nor in Șirna have any artifacts or features been found that could possibly be associated with elites. While it is possible that both smelting sites were nucleated workshops producing for unrestricted local consumption, elites interested in controlling the production and distribution of iron may have resided elsewhere in the vicinity. At any rate, elites are visible in and near other smelting sites. The belt buckle with open-work ornament from Sniadzin has good analogies in the Middle Dnieper region and Slovakia, both indications of long-distance contacts, perhaps between elites.<sup>35</sup> Settlement 5 in Budureasca is located less than a mile to the south from settlement 4 (Puțul Tătarului), which produced some of the most impressive pieces of evidence of long-distance contacts in the region, including a “Slavic” bow fibula and pressed belt mounts with good, Early Avar-age analogies in the Carpathian Basin.<sup>36</sup> It is therefore possible to interpret those finds as indications of the presence of elites, in which case the smelters in Sniadzin and Budureasca 5 may have been attached specialists.

It cannot be an accident that despite clear evidence of specialization of various crafts, the only one selected for attached production were weaving in the Carpathian Basin during the 6th century, pottery making in the Early Avar age, and smelting in the Lower Danube and Middle Volga regions, as well as in the northwestern parts of the forest belt and on the southern border of the taiga. Weaving in the 6th-century Carpathian Basin must have been targeted because of the importance of the dress in communicating social status, even though the concomitant production of dress accessories was not organized in the same way. The production of wheel-made pottery in the Early Avar age is most likely linked to the importance of feasting, to which may also be linked such archaeological phenomena as the deposition in high status graves of spoons (for the consumption of oysters) and strainers (for mulled wine).<sup>37</sup> The symbolism of iron, and its great role in the production of both tools and weapons is no doubt responsible for the selection of smelting.<sup>38</sup> It is important to note that evidence of crop cultivation, including agricultural tools, is

35 Viargei (1997), 35 and fig. 2/1; Korzukhina (1996), 681 fig. 91/20; Robak (2015), 55 fig. 3/8.

36 Teodorescu/Peneș (1984), 47 fig. 22/2; Măgureanu (2005); Măgureanu (2012). A fibula with bent stem is known from a sunken-floored building in settlement 5; see Teodorescu (2009), 342 fig. 22/1.

37 Tóbiás (2001); Lőrinczy/Straub (2003); Lőrinczy/Straub (2004); Lőrinczy/Straub (2005).

38 For the ritual symbolism of iron, see Menander the Guardsman, fr. 10.3, 116 and 118.

known especially from the two regions with the largest numbers of smelting sites—the Lower Danube and the Middle Volga. Moreover, a strong association was established by the 6th century between ironworking and social complexity. Smelting as attached specialization appeared along with social inequality and the rise of new polities. The large smelting sites at Zamárdi (Hungary) and Haivoron (Ukraine) emerged in the late 7th century at the same time as, and probably in association with the reorganization of the Avar and the rise of the Khazar qaganate, respectively.

## Trade and Non-Commercial Exchanges

Even though “we know little about Avar trade,” “the fundamental economic circuits of the Avar Empire” do not seem to have been “commercialized.”<sup>1</sup> Walter Pohl’s shrug of resignation stands in sharp contrast to Michel Kazanski’s overconfident postulate of a Scandinavian fur trade network across Eastern Europe during the 6th and early 7th centuries.<sup>2</sup> Both scholars employed a narrow definition of trade as a form of exchange that is market-based in terms of individual interactions, as well as on a systemic scale.<sup>3</sup> There is no evidence of markets either inside the Avar qaganate or on the southern and eastern shores of the Baltic Sea.<sup>4</sup> However, at least the Avars are known to have engaged in commercial exchanges. Avar envoys purchased goods from the market in Constantinople, while the qagan set a price for the ransom of his Roman prisoners of war.<sup>5</sup> According to the chronicle of Fredegar, Samo came to the Slavs living in close proximity to, if not within the Avar qaganate, in the company of several merchants doing business in the region.<sup>6</sup> Nonetheless, archaeologists believe that most goods of Byzantine origin, which have been found in

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- 1 Pohl (2018), 250 and 253. Nonetheless, Pohl believes that at least some “objects produced in the Byzantine world came to the Carpathian Basin as trade goods” and that “perhaps there was trade in half-finished alloys”; see Pohl (2018), 102 and 249.
  - 2 Kazanski (2010c), 15.
  - 3 Agbe-Davies/Bauer (2010), 15.
  - 4 According to Rosner (1990), 127, trade is the only possible explanation for the distribution in northern Pannonia, the lands between the Danube and the Tisza, as well as beyond the Tisza of the Great Ware produced in the kilns discovered at Szekszárd and several other neighboring sites. However, marketplace exchanges typically make a wide range of products available to most, if not all households. The distribution patterns shown in Vida (1999), 52 fig. 8, 53 fig. 9, 54 fig. 10, and 55 fig. 11 betray rather non-commercial exchanges based on clientage or other similar social bonds. Such a patchy distribution shows marked differentials in access to Gray Ware, most likely because of class and prestige considerations. A regional production-distribution approach to the same ceramic category in the Carpathian Basin before the Avar age may lead to similar conclusions. For the method and its use for distinguishing between marketplace and other, non-commercial forms of exchange, see Hirth (1998), 451–67; Stark/Garraty (2010), 45.
  - 5 Menander the Guardsman, fr. 5.4, 53; Theophanes Confessor, *Chronographia* 6092, transl., 279. For ad-hoc trade under the walls of Thessalonica, see the *Miracles of St. Demetrius* II 2.214, 189.
  - 6 Fredegar IV 48, 144. The Latin words for merchants and business are *neguciantes* and *negucium*, respectively. Exactly what was the object of the trade with the Wends has been a matter of some debate. See Labuda (1949), 274; Eggert (2001), 66; Charvát (2001).



Avar-age graves, have entered the Carpathian Basin not through trade, but as gifts or as booty.<sup>7</sup> On the other hand, few, if any market-based exchanges took place between the Avars and the neighboring provinces of the Empire in the Balkans, because there were no markets in those provinces. Most commercial exchanges involving goods piggybacked on *annona* transports (such as lamps or lamp moulds) took place inside forts, within the same rooms in which the *annona* was stored.<sup>8</sup> Throughout the sixth century, the northern part of the peninsula remained largely disconnected from commercial networks in the south, which may explain why amphorae appear in Avar-age assemblages only exceptionally.<sup>9</sup> Similarly, few copper coins reached the Carpathian Basin, and even fewer were specimens struck in Thessalonica as a response to the considerable demand for cash in the 6th century.<sup>10</sup> In other words, the absence of trade in the Carpathian Basin may be, at least in part the result of the absence of any market-based exchanges in the northern Balkans, a region almost completely dominated by the state-run redistributive mechanisms involving the *annona*. The economy of the northern Balkans was a command economy, in which market exchanges played a relatively modest economic role.<sup>11</sup> After ca. 620, there was no imperial presence in the northern Balkans, so no incentive for any kind of exchanges with the Carpathian Basin.

The situation of that region during the Avar age is in direct contrast with the previous period, particularly the first two thirds of the 6th century. Much of the current discussion of trade in archaeology is based on the use of archaeometry to characterize materials—stone, ceramics, or metals.<sup>12</sup> For example, the petrographic analysis of some of the quern stones discovered on 6th century sites in the Carpathian Basin has brought to light interesting conclusions, particularly that the source of material was often at a considerable distance. To judge from that evidence, market(place)-based exchanges must have taken

7 László (1969), p. 206; Garam (2001), 192–93; Bollók (2015), 179.

8 Curta (2017a), 447 and 450.

9 Csiky/Magyar-Hársegyi (2015), 180; Curta (2016a), 320. No ARS or PRS have so far been found in the Carpathian Basin.

10 A relatively large number of unprovenanced copper coins are known from museum collections in Hungary. However, as Somogyi (1997), 116 with n. 18 has pointed out, most of them have not been found in the Carpathian Basin. A few pre-Avar, 16-nummia pieces struck in Thessalonica are known from the Middle Danube region. Even fewer are the half-folles struck in Thessalonica after 562 that entered the Carpathian Basin; see Gândilă (2018b), 432 and 455.

11 For empires having a range of mechanisms propelled by different interests and loci of decision making, see Stark/Garraty (2010), 47.

12 Dillian/White (2010), 7.

place inside the Carpathian Basin during the 6th century.<sup>13</sup> The distribution pattern for those querns made of rhyolite or andesite cannot be explained in any other way.<sup>14</sup>

Sixth-century burial assemblages in the Carpathian Basin have produced beads made of semi-precious gemstones—agate,<sup>15</sup> amethyst,<sup>16</sup> carnelian,<sup>17</sup> chalcedony,<sup>18</sup> garnet,<sup>19</sup> magnesite,<sup>20</sup> rock crystal<sup>21</sup>—and coral.<sup>22</sup> Beyond mere recognition of those stones, no attempt has been made to characterize and source them.<sup>23</sup> At any rate, the beads must have entered the Carpathian Basin by means of exchange, whether from the Empire, Central or Western Europe.<sup>24</sup>

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- 13 A similar situation is archaeologically documented for the 8th century, when most quern stones found on settlement sites in Hungary were made of rock quarried in the southern Carpathians or in the valley of the Mureş River; see Bajkai (2016), 409.
- 14 In a study of exchange and procurement on the basis of demography and distance, Carr (2005), has demonstrated that marketplace exchange typically occurs at a regional and interregional scale between communities located at a distance of more than 320 km from each other.
- 15 Cseh et al. (2005), 100 and 252 pl. 22/5.
- 16 Sági (1964), 377 and pl. XXXI/3.
- 17 Bárkoczi (1968), 286 and pl. LXVII/4; Bóna/Nagy (2002), 219, 220, 222, 224, 249, 320 pl. 46/130.1, 321 pl. 47/139.1, 323 pl. 49/157.2, 324 pl. 170.1, 328 pl. 54/C, 335 pl. 61/15.3; Bárzu (2010), 187, 204, and 289 pl. 11/G57.4; Nagy (2012), 155 and 161 fig. 15/17.
- 18 Bóna (1956), 192 and pl. XLIV/8; Csallány (1961), 31, 56, 63, and 220; pl. VIII/11, pl. XXXVIII/4, pl. XLI/4; pl. CCIV/3; Kiss/Nemeskéri (1964), 102 and 103 fig. 5/44; Popescu (1974), 229 and 233 pl. 16/7; Horedt (1979), 147 and pl. 42/8; Tomka (1980), 13 fig. 9/4 and 17 fig. 13; Freedon/Vida (2005), 366; Hajnal (2008), 315.
- 19 Csallány (1961), 35, 56, 76, 80, 104, 113, 130, 173, 175, 178, 179, 182, 186, and 190; pl. III/18; pl. XXXVIII/4; pl. LXXIII/17; pl. LXXXIII/16; pl. CX/7; pl. CXI/3; pl. CXIV/14; pl. CXXIV/10; pl. CXXVI/4; pl. CXXVII/13–14; pl. CXXXVI/10–13; pl. CCXLIV/13–14; pl. CXC/22; Cseh et al. (2005), 130 and 287 pl. 57/1.
- 20 Tejral et al. (2011), 103, 171, 179, 195, and 197; 336 pl. 3.10/VIII.1–2, 343 pl. 10/23; 347 pl. 14/14; 352 pl. 19.71/5; 352 pl. 19.78/2.
- 21 For a list of finds, see Zábojník/Mitáš/Štubňa (2017), 346–47. To that list, one needs to add Csallány (1961), 179 and pl. CXXIV/4; Papp (1963), 116 and pl. 1/10, 11; Bárkoczi (1968), 279 and pl. LVII/7; Bóna (1998), 112 fig. 2/3; 116 fig. 3; Bóna/Nagy (2002), 222 and 323 pl. 49/157.2.
- 22 Horedt (1979), 190 and 168 fig. 83/8.
- 23 This is particularly difficult for carnelian, which exists in many places in Europe (Germany, Bohemia, Poland, as well as in the Crimea), Asia Minor, and India, in addition to the Arabian Peninsula and northern Africa. No information exists about the early medieval quarrying of carnelian in any of those places.
- 24 According to Zábojník/Mitáš/Štubňa (2017), 354 the rock crystal beads found in the Carpathian Basin were made in the Rhineland, “in the Alemannian territory.” Gavritukhin/Mastykova (1995), 17 rightly ascribe a Mediterranean origin to coral beads. The same is almost certainly true about *millefiori* glass beads, for which see Koch (1974), 500–01; Mastykova/Plokhov (2010), 344. However, contrary to Koch’s assumptions, a great number of *millefiori* beads appear in 6th-century burial assemblages, and occasionally in

Was that trade? The number of beads per site is rather small, and less than 20 sites are currently known in the entire Carpathian Basin for such finds.<sup>25</sup> This is in contrast to the situation in a much smaller area of southern Crimea, where agate, alabaster, amethyst, aragonite, carnelian, chalcedony, coral, and rock crystal (but neither garnet nor magnesite) beads have been found in abundance.<sup>26</sup> There can be no doubt that the Crimean beads came from the Empire, even though some at least may have been produced locally on the basis of imported materials. It is therefore not difficult to imagine that either the raw materials or the (half-finished) beads were part of a commercial network. Crimea was connected to the long-distance commercial exchanges inside the Empire. In the early 7th century, the lucrative trade attracted the attention of *kommerkiarioi* appointed by the imperial government, as indicated by

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- those of the Early Avar age as well. See Kovács (1913), 406 and 309 fig. 30/29; Kovrig (1954), 87 and pl. xx/3; Bóna (1956), 187 and 192; pl. xxvii/6; pl. xlv/8; Kovrig (1963), 28 and pl. xix/44; Papp (1963), 116; Svoboda (1965), 287 and pl. xcvi/14; Kiss/Nemeskéri (1964), 100, 109 and 110; 113 fig. 9/6; 114 fig. 10/3; Bóna (1970–1971), 63 fig. 8/6; Kiss (1977), 94 and pl. xxxvi/28; Erdélyi (1988), 193; Nagy (1998), 150 and 111 pl. 102/M17.4; Straub (2000), 205 and 222 fig. 3/2, 3; Bóna (2001), 192 and 193; 207 fig. 2/1, 2; 211 pl. 1/1, 4, 10; Pásztor (2001), 137; Bärzu (2010), 226 and 308 pl. 30/G181.1; Müller (2010), 126 and 336 pl. 89/1; Tejral et al. (2011), 203 and 355 pl. 22.86/3–6; Nagy (2012), 155 and 161 fig. 15/2, 3; 162 fig. 16; 163 fig. 17; Vaday (2015), 187 and 185 fig. 9/8.
- 25 The exception is the necklace of no less than 26 carnelian beads found in grave 170 of the cemetery excavated in Szolnok-Szanda; see Bóna/Nagy (2002), 224.
- 26 Agate: Repnikov (1932), 165; Loboda (1976), 137 and 139 with fig. 4/23; Aibabin/Khairedinova (2009), pl. 155/13; Aibabin/Khairedinova (2014), 200 pl. 52/6. Alabaster: Veimarn/Aibabin (1993), 6. Amethyst: Repnikov (1932), 163. Aragonite: Omel'kova (1990), 79 and 80 fig. 5/12. Carnelian: Repnikov (1906), 13, 17 and 27; Repnikov (1907), 111, 115 and 117; Repnikov (1909), 107; Repnikov (1932), 154, 159, 160, 162, 163, and 165; Veimarn (1963), 54; Loboda/Choref (1974), 100 and 101 fig. 1/10; Loboda (1976), 139 and 141; 140 fig. 5/16; Aibabin (1982b), 187; Omel'kova (1990), 79, 80, 84, 87 and 90; 74 fig. 4/27, 28; 80 fig. 5/22, 25; 84 fig. 8/22, 23; 88 fig. 11/5; 89 fig. 13/3; Veimarn/Aibabin (1993), 5, 6, 16, 27, 30, 31, 34, 35, 37, 40–42, 46, 49, 68, 95, 97, 98, 107, 112, 114, 117, 127, 130; 106 fig. 76/34; Aibabin/Khairedinova (2009), pl. 138/2g; Bemann et al. (2013), 38, 40, 42, 44, 45, 53, 56, 59, 61, 86, and 91; pl. 3/5; pl. 6/2; pl. 24/2, 3; Aibabin/Khairedinova (2014), 171 pl. 23/3d; 175 pl. 27/13, 15; 178 fig. 30/4; 186 fig. 38/1; 201 fig. 53/8, 9; 203 fig. 55/11, 12; 209 pl. 61/14; 254 pl. 106/19; 279 pl. 13/17; 192 pl. 144/13; 343 pl. 195/20; 344 pl. 196/18; 347 pl. 199/5. Chalcedony: Repnikov (1907), 110 and 147 fig. 127; Aibabin (1982b), 187; Aibabin/Khairedinova (2009), pl. 132/2k; Aibabin/Khairedinova (2014), 153 pl. 5/15; 175 pl. 27/14; 355 pl. 207/9. Coral: Aibabin/Khairedinova (2014), 157 pl. 9/16; 160 pl. 12/8; 175 pl. 27/8, 12; 251 pl. 103/8; 254 pl. 106/14; 297 pl. 149/13. Rock crystal: Repnikov (1906), 12, 16–18, 20, 24, 25; pl. 111/4, 9; Repnikov (1907), 109, 110 and 119; Veimarn/Aibabin (1993), 16, 41, 95, and 102; 105 fig. 75/15; Zaseckaia (1997), 447 and 469 pl. xiii/4; Aibabin/Khairedinova (2009), pl. 6/22; Bemann et al. (2013), 55 and pl. 20/6; Aibabin/Khairedinova (2014), 150 pl. 2; 347 pl. 199/20. No less than 34 carnelian beads have been collected from the burial chamber 316 of the cemetery excavated in Skalistoe, and many other burial assemblages produced between 10 and 20 specimens.

their seals found in Cherson.<sup>27</sup> There is therefore no surprise that gemstones reached the northern coast of the Black Sea. By contrast, those that reached the Carpathian Basin at the same time must have done so through non-commercial exchanges.<sup>28</sup> Those exchanges match Timothy Earle's description of "wealth finance": sumptuary goods produced by attached craftsmen; such goods were exchanged between elite groups at interregional level, in order to negotiate and maintain alliances.<sup>29</sup> With changing alliances, the wealth finance disappears. That is precisely why gemstones appear only sporadically in Early Avar-age assemblages.<sup>30</sup>

A similar interpretation applies to the distribution of amber beads in Eastern Europe.<sup>31</sup> There is a conspicuous fall-off in quantity from the Baltic zone, particularly in those areas closest to the sources in the Baltic region. Almost all 6th- and 7th-century amber beads known from archaeological assemblages in Eastern Europe have been found within a distance of 470 to 930 miles from the Baltic coast. During the 6th century, amber reached present-day Hungary and the Crimea in far greater quantities than during the previous period, and the boundary of its distribution extends farther to the southeast (the Caucasus region) and to the east (the easternmost parts of the forest-steppe, forest and

27 Alekseenko, (2004), pp. 265–67. Alekseenko (2003b), 79 notes that those were government officials working for the *apotheke* of Abydos and for that of Constantinople. Even though *kommerkiarioi* of Cherson appear only later, the correspondence to which the 7th-century seals were attached indicates the presence of the government staff in the Crimean city and, indirectly, the interest in the lucrative trade.

28 Trade in agate, alabaster, amethyst, garnet, or magnesite is unlikely, for such beads (or gemstones) do not appear anywhere in the Balkan provinces of the Empire. Only one chalcedony bead is known from the large, 5th- to 6th-century cemetery excavated in Belgrade (Serbia): Ivanišević/Kazanski (2002), 129 and 151 pl. 111/1. Similarly, only one coral bead is known from the entire Balkan Peninsula: Ćirjan (1970), 385 and fig. 4. For a few carnelian and rock crystal beads, see Ivanišević/Kazanski (2002), 127, 130, 134 and 136; 149 pl. 1/2.3; 151 pl. 111/19.1; 153 pl. v/58.3; 155 pl. vii/79.5; Balabanov (2010), 352. Gemstone beads appear sporadically in the western and northwestern parts of the peninsula. See Radimsky (1893), 306 and fig. 5; Stare (1980), 115–117; pl. 78/10; pl. 80/6, 8; pl. 88/9; Torcellan (1986), 80 and pl. 36/6, 8; Vinski (1989), 27 and 31; 54 pl. v/9; 69 pl. xx/2; Bavec (2003), 328.

29 Earle (1994) and Earle (2002). Earle opposes wealth finance to staple finance. The latter happens when elites appropriate and mobilize bulk resources (such as agricultural products), in order to manipulate that surplus for public displays of power and ideological legitimacy. See also Oka/Kusimba (2008), 355.

30 According to Pásztor (2014), 294, carnelian beads appear singly or in pairs in Early Avar-age burials. However, some of them, at least, are in fact recycled material of an older age; see Pásztor (2018), 93.

31 The following paragraph is based on Curta (2007).

even the taiga belts in Eastern Europe).<sup>32</sup> However, the quantity of amber decreased markedly in those regions that were closest to the Baltic coast: there were now greater quantities of amber farther away from the source than there were close to it, with a vast region in East Central and Eastern Europe devoid of any amber finds. Despite claims to the contrary, this spotty pattern of distribution suggests an exchange system very different from the down-the-line trade postulated for this period by many scholars.<sup>33</sup> Amber traveled in the 6th century from the Baltic coast to the Middle Danube and to Crimea as wealth finance.<sup>34</sup> As long as elites in all three regions maintained their local bases of power, the exchange system continued to serve their needs. Unlike gemstones from the Empire, amber continued to move southwards during the 7th century. During the second half of that century, amber beads appear in the Carpathian Basin in female burials, often in the company of rich grave goods, such as silver earrings, glass beakers, or drinking horns.<sup>35</sup> At that same time, amber beads also appear in hoards of bronze in Right and Left Bank Ukraine.<sup>36</sup> The disappearance of amber from archaeological assemblages in the Middle

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- 32 During the first three centuries AD, amber traveled along the trade route linking the Baltic coast to the Roman provinces in central Europe and to the Adriatic coast; see Wielowiejski (1984); Giovannini (2002); Kolendo (2007). For amber in the Far East of Eastern Europe, see Akhmerov (1951), 133; Alikhova (1959), 139; Mazhitov (1959), 122, 124, 125, 128, 129 and 132; Mazhitov (1968), 87, 95–100, and 104–106; 131 pl. 12/10; 141 pl. 20/5; Erdélyi/Ojtózi/Gening (1969), 59 and pl. x/8; Gening (1976), 97, 99 and 103; 93 fig. 3/30–32; 98 fig. 6/3–8; 100 fig. 7/2, 3; 102 fig. 9/12, 13; Poleskikh (1979), 16 fig. 9a/2; Goldina/Koroleva/Makarov (1980), 13, 153 pl. 12/10–22, 155 pl. 14/8; Krasnov (1980), 165 and 183; Ashikhmina (1986), 3; Vaskul (1987), 7; Shitov (1988), 40, 56 pl. x/21–24; Goldina/Vodolago (1990), 27; Bagautdinov/Bogachev/Zubov (1998), 32 and 179 fig. 81/14; Kazakov (1998), 109; 119 fig. 7/6, 9; 125 fig. 13/5–7; Nikitina (1999), 60 and 107 fig. 25B; Shcheglova (2010), 154; Goldina/Pastushenko/Chernykh (2011), 23, 95 and 97; 244 pl. 53/21, 23–32; 253 pl. 62/12–15, 18; Akhmedov (2014a), 283; Stashenkov (2016), 236 fig. 5/4. While characterization studies conducted on beads from Hungary have established the Baltic origin of the amber [Sprincz (2003), 203], no such studies exist for any of the finds from Eastern Europe. The possibility cannot be excluded, therefore, that that amber came from elsewhere, for example from India.
- 33 Werner (1950), 167; McCormick (2001), 693; Kontny (2011), 68. “Down-the-line” trade is part of the theoretical model of how frequencies of goods should change over space under different forms of distribution. That model has been proposed by Renfrew (1975), 41 and 43; 42 fig. 10; see also Renfrew (1977).
- 34 This applies even to occasional finds of raw amber, as published in Liubichev (1993), 30; Bóna/Nagy (2002), 64 and 357 pl. 83/3, 7, 8.
- 35 Garam (1979), p. 17; Kiss (1996), 142.
- 36 Rybakov (1949), 80 fig. 32b; Braychevs'kyi (1952), pl. IV/1–9; Shcheglova (1990), 198 fig. 7/5; Gavritukhin/Oblomskii (1996), 128 fig. 23/1–12; Korzukhina (1996), 397, 402, 419, 612 pl. 22/27, 637 pl. 47/4–6; Prykhodniuk (2005), 52 and 155 fig. 49/10; Rodinkova (2010), 82 fig. 5/16–18.

Danube region cannot be dated earlier than ca. 700 and must be understood as an interruption of contacts with elites on the Baltic Sea coast.<sup>37</sup>

Gemstone beads have also been found in the easternmost part of the forest and taiga belts of Eastern Europe.<sup>38</sup> There seems to be no doubt that they got there by trade.<sup>39</sup> However, they were not necessarily trade goods, but may have been brought as gifts for local elites.<sup>40</sup> The main commodities brought to Eastern Europe along the Northern Silk Road were silver and silk, a clear indication of elite consumption. They were exchanged for furs collected at key points by local elites. The fur trade was therefore implemented and operated by elites. The main agents were the Soghdian merchants, all of whom, as Etienne de la Vaissière has shown, were aristocrats.<sup>41</sup> Local elites gained power through control of rare and exotic materials, as well as the long-distance trade route reaching deep into Central Asia. Local markets, yet to be identified archaeologically, were specialty markets, in that the dominant emphasis there was on the high-value of both furs and the exotic goods brought from afar, even though staple goods for the consumption or provision of the foreign merchants may have also been present.<sup>42</sup> Because of the emphasis on exotic goods that were easily controlled by elites, the market for furs must have been small and limited in both size and scope. As a consequence, exchanges may

37 Nonetheless, after 700, amber continues to appear occasionally in the forest and taiga regions of Eastern Europe. See Krasnov (1980), 170 and 202 fig. 27/25; Goldina/Koroleva/Makarov (1980), 13 and 179 fig. 38/22; Goldina/Pastushenko/Chernykh (2011), 23 and 180 fig. 32/4.

38 Most beads are of carnelian and rock crystal: Akhmerov (1951), 133; Semenov (1967), 164 and 165; 170 pl. 11/6, 10, 11; 171 pl. 111/1; Mazhitov (1968), 86–87; Gening (1976), 97 and 103; 98 fig. 6/19; 101 fig. 8/14; Goldina/Koroleva/Makarov (1980), 13; 151 pl. 10/5, 11; 152 pl. 11/2; 156 pl. 15/7; 179 fig. 38/3, 4; Volkov/Pastushenko (2005–2006), 6. For isolated finds or carnelian and coral beads in the Middle Volga region, see Kalinin/Khalikov (1960), 246; Kazakov (1998), 119 fig. 7/2. For rare finds of chalcedony beads, see Goldina/Koroleva/Makarov (1980), 13 and 156 pl. 15/7. For exceptional finds of coral and rock crystal beads in the forest-steppe region, see Lipking (1974), 149; Gavritukhin/Oblomskii (1996), 210 fig. 34a/33–37.

39 Ruslanova (2014), 22–23. Goldina (1996), 242 and Goldina (2011), 116 believes that the carnelian beads came from Iran.

40 For the coexistence of “market mentality” with other forms of exchange in premodern societies, see McC. Adams (1974), 239; Blanton/Fargher (2010), 222.

41 Vaissière (2002), 158–60.

42 For the notion of “specialty market” dominated by prestige goods, see Hirth (2010), 233. It is possible that cereal seeds identified at Verkh Saia 1 (see chapter 15) were not for local consumption, but remains of grain stored on the site for the provision of foreign merchants in transit or visiting a market nearby.

have taken place in restricted places, such as the stronghold at Verkh Saia.<sup>43</sup> It is probably through such “restricted places” that the Sassanian drachms and the Byzantine hexagrams entered the region of the Sylva and Upper Kama rivers in what is now the northeastern part of the Volga Federal District of Russia. Like silver plate, gemstone beads, and silk, some of those coins were redistributed inside that region, or even farther to the west (into the region of the Middle Volga). However, because of their deposition in hoards, graves and especially, at sanctuary sites such as Ust’-Sylva, once acquired through market exchanges, the coins ceased to circulate as such and turned into “inalienable possessions.”<sup>44</sup> In other words, at a local scale, between communities located within a relatively short distance from each other, the main forms of exchange were non-commercial.

A very similar picture results from the examination of coins in the region north of the Lower Danube now within Romania, the Republic of Moldova, and Ukraine. Unlike the coins found in the easternmost parts of the forest and taiga belts of Eastern Europe, those were mostly copper coins, each one worth relatively little inside the Empire, where their conventional, fiduciary value was guaranteed by the imperial government. How were those coins acquired by those living outside the Empire? Some believe that the presence of copper coins in the lands north of the Lower Danube river is a sure indication of outright or even permanent commercial relations between merchants in the Empire—whether based in cities and forts south of the Danube, or traveling north of that river—and the local population.<sup>45</sup> Under such assumptions, the local population exchanged such goods as salt, honey, cattle, “possibly furs and skins” for the coins in question.<sup>46</sup> Others rightly noted that such exchanges, if they ever took place, must have been imbalanced, unequal and even unjust, for the exchange value of the copper coins varied considerably in the 6th century, as a consequence of the variations in reckoning the *follis* (main denomination of the copper coinage) to the *solidus* (as money of account) introduced by several emperors through their respective monetary reforms.<sup>47</sup> While in the

43 The commercial nature of the site is betrayed by the bronze weight of four ounces that was found there; see Goldina/Pastushenko/Chernykh (2011), 288 pl. 101.

44 The six hexagrams struck for Heraclius recovered from Ust’-Sylva, together with silver ingots, a great number of carnelian and rock crystal beads, as well as a large amethyst piece, were struck with the same dies as the coins found in the Bartym and Shestakovo hoards; see Mel’nichuk/Vil’danov/Godobin (2004), 126–28. For “inalienable possessions,” see Weiner (1992).

45 Teodor (1981), 28; Oberländer-Târnoveanu (2003), 41; Ciupercă (2007–2008), 130.

46 Gândilă (2009), 457.

47 Gândilă (2018a), 272, points out that barter would have been preferable to such unequal exchanges. For the compulsory rate of exchange between copper and gold, see Hahn

mid-6th century, a solidus was worth about 200 folles, the rate more than doubled by the end of that same century.<sup>48</sup> Moreover, because of their fiduciary nature, the copper coins reaching the lands north of the Lower Danube would have to return to the Empire through market exchanges in order to have any value at all. Such exchanges were not possible in any of the fortresses along the Danube, for no markets existed in any of them.<sup>49</sup> Because of those and other similar considerations, “the idea that the coins reflected trade between the Empire and local communities is untenable.”<sup>50</sup> Instead, the relatively large number of copper coins found in Romania, the Republic of Moldova, and Ukraine must be explained in terms of “displaced Romans,” namely captives from the numerous Sclavene raids into the Balkan provinces of the Empire. In addition, some coins were probably brought to those lands by barbarian veterans, who returned home after serving for a while in the Roman army.<sup>51</sup>

The problem with such an interpretation is that it is based on a number of unwarranted assumptions, while ignoring some obvious features of the distribution and structure of the numismatic material. Most coins found north of the lower course of the Danube and its delta come from a band of territory no wider than 62 miles from the river. While the lack of an archaeological context prevents any interpretation of specific finds, the distribution itself is very significant, as it shows a clear pattern of fall-off from the supply zone (in this case the Empire located south of the Danube frontier).<sup>52</sup> This pattern is the exact opposite of that identified for the distribution of amber. It is unlikely that all prisoners of war or all veterans moved only to the region closest to the river Danube, where they began dropping coins out of their pockets. Moreover, the careful study of the structure of the coin material shows that there was no

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(1973a), 27–28; Hahn (1975), 15–16; Hahn (1981), 16–20. The somewhat modified values advanced by Hahn (2000), 9–11 are based on the inclusion of the light-weight solidi, the purpose and monetary role of which are still a matter of debate. For a succinct presentation of the various scholars’ calculations of the rate of exchange between solidus and follis during the entire period between 498 and 615, see Curta/Gândilă (2011–2012), 68 table 2.

48 According to Hahn (1973b), 177 the main reason for so many alterations of the compulsory rate of exchange was the government’s desperate attempt to fund Justinian’s wearisome wars.

49 Gândilă (2018a), 284: “frontier fortresses could not export a monetized economy in the lands north of the Danube simply because they did not develop one themselves.”

50 Gândilă (2018a), 271.

51 Gândilă (2018a), 269–70.

52 For recently updated maps of the distribution of 6th- to 7th-century coins north of the Lower Danube and the Black Sea, respectively, see Gândilă (2018a), 164 fig. 26 and 165 fig. 27.



significant difference between the numismatic profiles of the lands south and north of the river Danube. In western Walachia (to the west from the river Olt), for example, “coin circulated through the mediation of the Byzantine fortresses on the northern bank of the Danube” (Drobeta and Sucidava). As for the rest of Walachia, Moldavia, Moldova, and the steppe lands in the northwestern region of the Black Sea, “the coin flow was dictated by developments” in the neighboring provinces of Moesia Secunda and Scythia.<sup>53</sup> If coins reached the lands north of the Lower Danube through POWs or veterans, the structure of the coin series would be considerably different from that of the Balkan provinces of the Empire closest to the Danube, because the Sclavene raids reached much deeper into the Balkans, while veterans may have fought and lived in, as well as procured coins from many other parts of the Empire.

Underlying the rejection of commercial exchanges between communities on both sides of the river Danube is the assumption of a free, perfectly self-regulating market for which neither the “primitives” in *barbaricum*, nor the soldiers in hilltop forts were economically prepared.<sup>54</sup> There is, however, clear evidence that the Sclavenes understood the meaning of money and were ready to set free their prisoners of war in return for a small ransom.<sup>55</sup> This suggests that they were capable of rational utility-maximizing choices of the sort that

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53 Gândilă (2018a), 171–72.

54 Gândilă (2018a), 256 argues that the main function of “foreign coins” in primitive societies is that of jewelry (pierced coins worn as pendants) or bullion for the production of jewelry (bracelets, necklaces, earrings, etc.). However, there are so far no finds of pierced coins in the lands north of the Lower Danube. Early Byzantine copper coins that reached those lands were definitely not “kept as personal belongings or objects of prestige” [Gândilă (2009), 459]. Gândilă (2018a), 256 may be right: “early Byzantine coins rarely returned to the Empire.” However, the idea that “primitives” had no markets and could not therefore have regarded coins *as coins* is a veiled attempt to exclude trade from substantivist theory. As Oka/Kusimba (2008), 356 have noted, attempts to embed all premodern economic interactions in social relations “serve to smother or to negate any commercial motivations that nonmodern peoples may have had.” For the wrong assumption of the free, self-regulating market as operating in ancient societies (or any other society, for that matter), see Feinman/Nicholas (2010), 89: “the notion of an entirely free, perfectly self-regulating market, whether advanced by the political left or right, seems more an ideological stance trumpeted in economic textbooks than a realistic portrayal of specific historical circumstances.” Early medieval economies were more likely organized into intertwined chains of commodities (understood as all goods exchanged interpersonally, “at whatever scale from the household to the global systems”), the production, exchange, and use of which were all embedded within the social context of meaning and manipulation; see Earle (2010), 210.

55 *Strategikon* XI 4, 372. For commercial exchanges (a captive believed to be Chilbudius in exchange for a payment in gold coins) between Sclavenes and Antes, see Procopius of Caesarea, *Wars* VII 14.17, 66.

would be associated with commercial exchanges. There is also good evidence that the subsistence economy in the lands north of the Danube produced sufficient surplus to attract the attention of Roman military commanders. This is in sharp contrast to the chronic problems of supplying garrisons of hilltop forts in the Balkans with sufficient food. It is possible therefore that members of communities north of the Lower Danube were selling small amounts of food to garrisons in the forts along the river, in exchange for equally small amounts of money. Exchange activities can be maintained at the household level in the face of significant logistical constraints, such as the lack of a formal trade infrastructure.<sup>56</sup> That coins were involved at all in such exchanges may not have been the consequence of any market mechanisms, but simply the result of the fact that barter was not an option for soldiers that had no other goods that they could offer in return, and that would be of some interest to their Slavene neighbors.<sup>57</sup> Were the coins a real equivalent of the presumably agricultural goods brought to the forts? In the absence of any information about the dates at which various coins reached the lands north of the Danube River, it is unfortunately impossible to assess their respective values at the time when such exchanges may have taken place. In other words, it is impossible to tell whether the soldiers in the Danube garrisons cheated on the commercial exchanges in which they engaged. There is perhaps no accident that over 65 percent of all copper coins found in the lands north of the Danube are folles, despite the denomination variety in existence at that same time in the Lower Danube provinces.<sup>58</sup> Members of communities in *barbaricum* may not have been able to stay updated on the latest alterations of the rate of exchange between solidus and follis that were decided by the imperial government in Constantinople. On the Lower Danube frontier, they may have cautiously preferred to be paid with the largest (and heaviest) copper coins, just in case. It is of course possible that once acquired through trade, those coins then exchanged many other (barbarian) hands. Whether those exchanges still

56 Smith (1999), 129.

57 Such exchanges may in turn explain the presence on fortified sites on the right bank of the Danube of pottery most typical for ceramic assemblages from settlement sites on the opposite bank of the river, in *barbaricum*. Attributed to the so-called Prague and Pen'kivka cultures, this pottery is more often than not interpreted as an ethnic marker, i.e., as a sign of the presence in local garrisons of soldiers recruited from among barbarians (Slavenes or Antes). See Vilceanu/Barnea (1975), 215–16; Opař (1996), 104–05; Comșa (1999); Angelova/Koleva (2000), 169; Topoleanu/Teodor (2009), 349 and 353–54; Teodor (2010). It is more likely that those were the containers in which small quantities of food were occasionally sold to the garrison population by members of the communities in the lands north of the Danube River.

58 Gândilă (2009), 458.

represented trade will forever remain unknown. At any rate, no archaeological evidence exists so far of commercial exchanges inside the 6th- and 7th-century communities in the southern and eastern parts of present-day Romania. Nor is there any evidence that, like the Sassanian drachms and Byzantine hexagrams in the Western Ural and Middle Volga regions, copper coins were turned into “inalienable possessions.” No coins were deposited in graves discovered in the Lower Danube region, and hoards of copper most likely represent collections brought to the region from the Balkan provinces, not local accumulations.<sup>59</sup> When coins are found in well-documented archaeological contexts, they are instead an indication of metalworking (see chapter 8). In other words, if this alternative interpretation of the copper coins in the Lower Danube region is correct, then commercial activities through which they may have been obtained were economically not only secondary, but also marginal.

If one takes into account the strong correlation between production and commercial exchange, there are in fact only three regions in Eastern Europe for which the existence of trade in the 6th and early 7th century is undeniable—Greece, Crimea, and the West Ural region of Eastern Europe. The first two regions were connected to the trade networks inside the Empire, with little, if any evidence of contacts with neighboring regions either inside or outside the Empire. Their economic profiles were radically different. In Greece, trade was associated with agriculture, particularly with grain and olive oil, while the main commodities in the Crimea were fish and fish sauce. In both cases, exchanges involved commodities in bulk, not sumptuary goods. By contrast, the fur trade in Eastern Europe had no obvious, direct connection either to the Sassanian or to the Byzantine Empire and was most clearly organized as trade between elites. This was trade in luxury, not bulk goods. Despite such notable differences, trade had a transformative effect on all three regions. Trade was neither a subordinate component of the political economy, nor an epiphenomenon of production.<sup>60</sup> Exactly how trade and social change were articulated in ancient

59 Only a few copper coins are known from burial assemblages discovered in the Carpathian Basin. See Rhé/Fettich (1931), 25 and pl. 111/14; Nagy (1959), 62 and pl. XXV/6; Csallány (1961), 145 and 292; Erdélyi/Németh (1969), 194 and 195 pl. XXV/6; Lovász (1986–1987), 138 and pl. 1V/3; Kiss (1996), 74; pl. 455/253.9; pl. 138/10; Ruttikay (2007), 336; Winter (2009), 342; Bârză (2010), 229.

60 Wickham (2006), 694 believes that commerce is “fueled by the existence of agrarian surpluses and artisanal production on one side, and demand on the other.” Such a definition is much too narrow, at least in the case of the fur trade in Eastern Europe. In a typically Marxist stance, Wickham treats trade as inherently unequal and as a destabilizing mechanism in which labor and resources are transferred to another as traders, while more powerful communities take advantage of weaker or less developed groups; Wickham (2006), p. 707. For such an approach as ideologically driven, see Oka/Kusimba (2008), 354.

societies is far from clear, but, judging from the evidence available for 6th- to 7th-century Southeastern and Eastern Europe, local elites had no say over the immediate procurement and production of goods.<sup>61</sup>

What kinds of exchange were in operation in other parts of Eastern Europe? According to Chris Wickham, “normal exchange was strictly local and small scale, and not necessarily commercial—gift-exchange is as likely a basis for much of it,” at least in Anglo-Saxon England before ca. 700.<sup>62</sup> Opposing commerce to “gift-exchange” betrays a strongly substantivist approach, but the underlying assumption is that the early medieval societies were rural, corporate communities that were basically self-sufficient. The only reason for the exchange of material goods between such communities was to cement social, marital, and political alliances, an idea well attuned to the notion that gifts were the “glue” of society.<sup>63</sup> Substantivists treat “gift-exchange” as “reciprocity,” involving two or more relatively equal parties.<sup>64</sup> By contrast, redistribution refers to “appropriational movements towards a center,” in other words to the controlled mobilization of surplus for institutional finance.<sup>65</sup> The largest and by far the most impressive example of a redistribution system in the 6th century was the “tax-induced transfer of food” to some cities, the army, and the civil administration of the Roman Empire.<sup>66</sup> The *annona* was in fact the mechanism through which the provinces in the northern Balkans could be kept inside the Empire even without having the ability to support themselves economically. Large amounts of supplies, primarily food, moved to the Balkans from the Aegean, as indicated by the distribution of LR 2 amphorae.<sup>67</sup> In fact, the relative prosperity of the cities on the western coast of the Black Sea was based on their role as ports of entry for the *annona* shipped to the northern

61 That applies both to the production of bulk goods in Greece and the Crimea, and to the procurement of furs in Eastern Europe. As Earle (1982), 3 has noted three decades ago, “no coherent body of theory exists to explain exchange and its linkage to broader sociocultural forms.”

62 Wickham (2006), 808. Similarly, Pohl (2018), 235, believed that the characteristic for Avar society was the “exchange of gifts.”

63 Bijsterveld (2001); Wickham (2006), 694. The idea of the gift as social “glue” goes back to Mauss (1923–2924). Inspired by Mauss, Grierson (1959) is largely responsible for the dichotomy gift(-giving) vs. trade. For the influence of the debate between formalists and substantivists on the current preoccupation with gifts and gift giving, see Graeber (2001).

64 Polanyi (1957), 251.

65 Polanyi (1957), 250. For the subsequent transformation of the concept of redistribution, primarily in economic anthropology, see Earle (2011), 238–39.

66 For the *annona*, see Durliat (1990); Carrié (2007). The phrase “tax-induced transfer of food” is from McCormick (2001), 86.

67 Karagiorgou (2001); Curta (2016a), 309–11.

Balkans from the richer provinces in the southern part of the Mediterranean region. Some have rightly noted that, at the point of collection, the *annona* system cannot be understood without the compulsory purchase of goods by the state, at state-determined prices, for the state's needs (*coemptio*).<sup>68</sup> Almost no scholarly attention has been paid, however, to the manner in which the *annona* was distributed at the receiving point, in the Balkans. It was most likely brought by sea to the entrepôts on the western coast of the Black Sea, the most important of which was Tomis (now Constanța, Romania).<sup>69</sup>

How did the *annona* move into the interior? Recent finds of donkey, mule and camel bones in faunal assemblages from Caričin Grad strongly suggest that pack animals were employed for the task.<sup>70</sup> Meanwhile, the distribution in the Balkans of certain categories of lamps, cast fibulae with bent stem, and small denominations of the copper coinage has been explained in terms of transports of *annona*.<sup>71</sup> Actually, none of those artifacts was part of the *annona*, so their presence on hilltop sites in the interior implies that they were commodities of small-scale trade piggybacked on transports of *annona*. On a few sites, there is in fact clear evidence of rooms for the storage of the *annona*, as well as of other necessities, pieces of military equipment, or even agricultural implements, all of which could be obtained by soldiers in the local garrisons at a price to be paid in coin.<sup>72</sup> In other words, in the absence of any marketplaces, rooms reserved for storing the *annona* also served as retail shops. If commercial exchanges took place on military sites in the interior, it is possible that in charge with the capillary distribution of both *annona* and other goods were local merchants, peddlers who moved from one fort to another or within a restricted, small area.<sup>73</sup> It is equally possible, however, that the *annona* moved

68 Wickham (2006), 75. *Coemptio* was also introduced by imperial edict into the Balkans in the late 5th century. That was as a reaction to the fact that, already at that time, the *annona* could not be collected from those provinces.

69 Constanța is the site in the Balkans that has produced the largest number of LR 2 amphoras dated to the 6th century; see Rădulescu (1973). Most amphorae come from the large warehouse known as the Building with Mosaic Pavement, for which see Canarache (1967).

70 Baron/Reuter/Marković (2019), 120; Marković/Reuter/Birk (2019), 26–27. Both camel and donkey appear also in faunal assemblages from Roman sites on the Lower Danube; see Stanc (2006), 97, 137 and 172; Benecke (2007), 394; Kroll (2010), 60.

71 Curta/Gândilă (2011), 66; Curta (2016f), 96, 102 and 104; Curta (2017a), 450.

72 Popović (1987), 28; Uenze (1992), 477–78; Opriș/Rațiu (2017).

73 However, there is no direct evidence of such peddlers either in the historical, or in the epigraphic record. For inscriptions attesting merchants active in the entrepôts of the Black Sea coast, see Beshevliev (1964), 66–67; Popescu (1976), 23, 28, 44 and 92–93. That commerce was flourishing in the area results, among other things, from the commercial seals found in the Balkans, the majority of them in the Dobruđa; see Curta (2016a), 319. Moreover, the seal of a *kommerkiarios* named Areobindus, who was also prefect (possibly

into the interior along the lines of military communication and provisioning, and those in charge with its local distribution and the sale of other commodities were members of the military.<sup>74</sup> Such a blending of military and commercial functions was, after all, the essence of the new administrative unit of the *quaestura exercitus* created in 536, and may have encouraged the proliferation of middlemen who were at the same time officers in the army.<sup>75</sup> The strong association between the army and the redistributive mechanisms involving the *annona* may well explain the sudden collapse of the Roman power in the Balkans in ca. 620. The definite cessation of grain supplies from Egypt, at that time occupied by the Persians, made it impossible to maintain troops in the Balkans.<sup>76</sup> In the absence of any substantive, local production of food, the withdrawal of troops (some of which were relocated in western Anatolia) was accompanied by a mass evacuation of all settlements, with the exception of the coastal cities. By 630, the interior was sparsely inhabited, if not completely deserted (see chapter 4).

The redistributive system involving the *annona* had no visible impact on the Crimea, despite the obligation of both Chersonesus and Bosphorus to feed the fleet, as indicated by a novel of Emperor Tiberius II (see chapter 5). Outside the empire, the evidence of redistribution as a form of exchange is even more elusive. According to Chris Wickham, tribute in early medieval tribal societies was a form of redistribution.<sup>77</sup> As far as East Central Europe is concerned, such an idea finds no support in the historical sources. For example, the qagan of the Avars sent an embassy in 578 to a Slavene chieftain named Daurentius (or Dauritas) asking him and his people to obey the commands of the Avars and “to be numbered amongst their tributaries.”<sup>78</sup> His demand was met with indignation and his envoys were killed on the spot. In spite of an Avar punitive expedition against Daurentius, his Slavenes never paid tribute to the Avars. More than half-a-century later, Samo moved to a group of Slavs who were

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of the East), suggests that trade on the western Black Sea coast has attracted the attention of the imperial government; see Lazarenko (2011); Curta (2016a), 314–15.

74 Curta (2017a), 449 believes that middlemen such as the officers in charge of the distribution of the *annona* took advantage of their position to enrich themselves.

75 For the *quaestura exercitus*, see Szádeczky-Kardoss (1985); Torbatov (1997); Curta (2002); Gkoutzioukostas (2008); Gkoutzioukostas/Moniaros (2009); Curta (2016a); Oprüş/Raþiu (2019). For the military role of the *quaestura exercitus*, see Wiewiorowski (2004); Wiewiorowski (2006); Madgearu (2009); Mărculeţ (2017).

76 Curta (2001c), 189. As McCormick (2001), 116 aptly put it, the *annona* system “worked up until the very moment when the supplying region was conquered by enemy forces.”

77 Wickham (2006), 695.

78 Menander the Guardsman, fr. 21, 194–95. For this episode, see Curta (2001c), 91–92; Kardaras (2006), 31–33; Pohl (2018), 81–82.

paying tribute to the Avars for some time, in addition to many other abuses that they had to endure.<sup>79</sup> Soon after that, the Wends rose in rebellion against the Avars and stopped paying them anything. Was that redistribution? If so, how exactly did the Wends pay their tribute to the Avars—in bulk staple or in prestige goods?<sup>80</sup> And once collected, to whom were the resources obtained as tribute subsequently redistributed by the Avars? In reality, the indignation caused by the demand of the qagan of the Avars that Daurentius and his Sclavenes obey his command *and* pay tribute suggests a very different type of transaction. Alain Testart has called “third-type transfers” (t3t) those transactions that are both required and forced by juridical norms (and often backed by a threat of violence), but which have no required counterpart.<sup>81</sup> Taking tribute from the Sclavenes or the Wends was no “pooling,” because it did not sustain any community, and at least in the former case, it did not at all result in sustaining the “corporate structure” of the qaganate.<sup>82</sup> “Pooling” was something very different from tribute-taking, as it stipulated “a social center where goods meet and thence flow outwards, and a social boundary too, within which persons (or subgroups) cooperate.”<sup>83</sup> As a matter of fact, in a study of a particular ceramic category, the clay pans, I have recently advanced an archaeological model of intrasite analysis of 6th- and 7th-century settlements, which is meant to highlight the redistribution of local products, especially flat loaves of bread, through communal ceremonies. At Davideni (eastern Romania), clay pans signal the existence of one or two areas of communal activities involving, among other things, the production and consumption of pita-like, unleavened, or slightly leavened flat bread. It is reasonable to believe that the relatively large quantities of flour necessary for baking many flat loaves of bread for the occasion were “pooled” from the resources of the entire community, members of

79 Fredegar IV 48, 208. For the relations between the Avars and the Wendish Slavs mentioned in Fredegar’s chronicle, see Pohl (2018), 138–39.

80 Pohl (2018), 142. The Avars also asked for tribute from two Roman cities in the Balkans (John of Ephesus, *Ecclesiastical History* VI 45, 259). In this case, the context clearly indicates that the tribute was to be paid in agricultural produce.

81 Testart (2007), 21 and 51–57. Testart also treats taxes as t3t, not as redistribution. To Wickham, they are sometimes species of the same genus (redistribution), and other times very different notions; Wickham (2006), pp. 70 and 695. Wickham is also wrong when taking “war booty and piracy” to be a form of redistribution; see Wickham (2006), 695. They are in fact what, building upon Testart’s path-breaking work, Athané (2011), 222–32 has called “fourth-type transfers,” along with theft, fraud, and racketeering: “des transferts exigés et obtenus mais non exigibles.” For a typology of such illegitimate transfers, see Darmangeat (2016), 28–29.

82 For redistribution as “pooling” and its social purposes, see Sahlins (1972), 188–90.

83 Sahlins (1972), 189.

which participated in the communal activities and ceremonies involving the consumption of special foods.<sup>84</sup>

Much earlier generations of scholars believed that tribute payments and exploitation defined the Avar-Slavic relations.<sup>85</sup> Some modern historians take true insights into the dynamics of those relations from episodes of gift giving.<sup>86</sup> For example, in 592 Maurice's troops captured three Sclavenes from "the boundary of the western ocean." They told the emperor that the qagan of the Avars had "lavished many gifts" on their rulers in an attempt "to levy a military force," which he was hoping to use against the Romans. The Slavic rulers "accepted the gift but refused him the alliance."<sup>87</sup> Less than 25 years later, in order to convince the Avars to come on their side and help them conquer Thessalonica, the Sclavenes led by Chatzon "collected imposing gifts and had them brought to the khagan of the Avars."<sup>88</sup> In both cases, the implication is that gifts could "buy" military alliance.<sup>89</sup> In other words, this looks like what

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- 84 Curta (217b), 130–41. Curta (2001c), 303 and 307 notes that all sites examined by means of the intrasite analysis of artifacts were sociopetal settlements, in which the communal front region, where activities involving the entire community were performed, was placed at the center. This area may have been an arena of social competition, a "beyond-the-household context" for displays of symbols of leadership by some of those who organized ceremonies of redistributive character.
- 85 Peisker (1905); Preidel (1946–1952); Grafenauer (1955); Zastěrová (1958); Koroliuk (1963); Tyszkiewicz (1989).
- 86 Pohl (2018), 140.
- 87 Theophylact Simocatta, *History* VI 2.12, 223; transl., 160. For this episode, see Wołoszyn (2014); Prostko-Prostyński (2015); Wołoszyn (2016); Kotłowska/Różycki (2018), 20–22.
- 88 *Miracles of St. Demetrius* II 2.197, 185. Živković (2008), 50 believes that in the eyes of the anonymous author of Book II of the *Miracles of St. Demetrius*, Chatzon and the qagan of the Avars were equals, since they were both called "exarch." Nonetheless, according to Pohl (2018), 286, when offering gifts to the qagan, Chatzon and his Sclavenes "rather appear as supplicants," namely as socially inferior. That the gifts offered to the qagan were "impressive" is clearly a sign of status differentiation, but in the opposite direction. In interpersonal relationships, the so-called "spread of status value" occurs when the value of an exchanged object is linked to the status of the giver. Since the value of the object that a higher status person gives is higher, the lower status person, in return, feels obligated to give more to the higher status person in frequency or quantity to compensate for the differences in status value; see the Park/Kim (2017), 142. It is unlikely that the qagan regarded the gifts sent by Chatzon as the price (or the equivalent) of his military cooperation. He definitely took some time to respond, as the Avar attack on Thessalonica (the "qagan's war") began only two years later. This strongly suggests that the qagan was not quite sure how to interpret Chatzon's gesture. When relative status is unclear, "individuals subtly claim superiority and dominance through delayed gift reciprocation" [Park/Kim (2017), 143].
- 89 Such an interpretation most certainly applies to gifts sent from Constantinople to the Avars, as well as to occasional gifts that the emperor received from the qagan, such as those



Chris Wickham, following Marcel Mauss, would call “reciprocity,” namely “the exchange of objects or services for the express purpose of establishing social links between two or more parties.”<sup>90</sup> To both Chris Wickham and Walter Pohl, reciprocity is another word for “exchange of gifts.”<sup>91</sup> However, to the extent that gift-giving transactions are never equivalent, even when apparently balanced, gift-giving cannot be reduced to the notion of (reciprocal) exchange: a true gift never requires a counter-gift, because its underlying premise is to give generously. As a consequence, the idea of an exchange of gifts makes no sense: it is in fact an oxymoron.<sup>92</sup> If the qagan or Chatzon wanted military assistance from the Slavs, then they were not truly giving any gifts, since they had calculated the return. Gifts, however, are explicitly mentioned in the sources, but in only one direction. So, this was not truly an *exchange* of gifts.

Theophylact Simocatta narrates an episode of the war between the Avars and the Romans. In 598, Easter caught the Roman armies fighting the Avars in the hinterland of Tomis (now Constanța, Romania). They were famished and with no supplies, so, in a surprising move, the qagan offered food to Priscus’ troops and proposed a truce to allow them to celebrate Easter. He then requested from Priscus some Indian spices in exchange, and accepted the

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brought to Constantine IV in 678 by Avar envoys (Theophanes Confessor, *Chronographia*, 496). The Romans could also win over some of the Slavene “kings” “by persuasion or by gifts,” taking advantage of the fact that the Slavene chieftains were “always at odds with one another” (*Strategikon* XI 4, 380; transl., 123).

90 Wickham (2006), 694. Marcel Mauss only discussed reciprocity in relation to the potlatch, a form of agonistic gift-giving practices, in which the main purpose is to “flatten” the other, to the extent that one gives more than one thinks the other can ever give in return. To Mauss, “the obligation to reciprocate constitutes the essence of the potlatch in so far as it does not consist of pure destruction ... The potlatch must be reciprocated with interest, as must indeed every gift” [Mauss (2001), 53]. As Godbout (2000), 205 has pointed out, although based on the logic of equality, the potlatch never aims to achieve the ideal of balanced reciprocity. For a critique of Mauss’s notion of “gift” and of forced reciprocation, see Athané (2011), 11–38.

91 Wickham (2006), 694; Pohl (2018), 235.

92 According to Sahlins (1972), 193, gift giving (which he calls “generalized reciprocity”) refers to transactions that are putatively altruistic. Testart (2001), 74, notes that “gift exchange” is a “monstruosité logique de même nature qu’un cercle carré.” From a similar position, Curta (2006a) argues against the idea that early medieval gift giving involved balanced reciprocity. In other words, to employ Sahlins’s terminology, gift giving was not about direct exchange, but about putatively altruistic transactions. Wickham (2010), 254 declares himself unconvinced. To Wickham, “gift-exchanging oiled the wheels of power at all levels” [Wickham (2010), 249]; if so, what could that possibly have to do with reciprocity? The conceptual confusion seems to run very deep. Meanwhile, Pohl (2018), 235 believes that barbarian societies were held together by “a continuous *circulation* of gifts” (emphasis added).

“Roman gifts.”<sup>93</sup> This is clearly reciprocation. However, since he *requested* the Indian spices, the qagan did not really receive any gifts. Nor was Priscus truly free to give them, for he was expected to offer something in exchange to an enemy proposing truce and adding a food offer to sweeten the deal. The episode, therefore, illustrates exchange, but not of gifts. To call this “gift exchange” is not only to muddy the waters conceptually, but also to turn a blind eye to the fact that anthropologists already have a catch-all term for exactly that kind of exchange—wealth finance.<sup>94</sup> One does not really need another name for what was essentially a sequence of transactions with sumptuary goods that were meant to negotiate and maintain alliances. While there is no historical or archaeological evidence of true gift giving, wealth finance best describes the distribution of exotic or “special” artifacts in East Central and Eastern Europe. As such (but without being named), the concept has been used to explain a variety of inter-elite exchanges within the region—between the Carpathian Basin, eastern Lithuania and northeastern Poland;<sup>95</sup> between the Baltic region and the forest belt in northwestern Russia;<sup>96</sup> between the Lower Danube region, Mazuria, and the Crimea;<sup>97</sup> between the Lower Danube and the Middle Dnieper regions;<sup>98</sup> between the Lower and Middle Danube region and the Crimea;<sup>99</sup> between the forest belt and the Crimea;<sup>100</sup> between the forest belt, the Lower Danube and the Middle Dnieper region.<sup>101</sup> Inter-regional exchanges, particularly with Merovingian Francia, and the ensuing emulation and imitation phenomena have also been discussed in similar terms.<sup>102</sup> More often than not, the objects of those exchanges were female dress accessories—fibulae, buckles, and bracelets, which strongly suggests that wealth finance

93 Theophylact Simocatta, *History* VII 13–15, 268; transl., 197. According to Pohl (2018), 188, the episode supposedly shows that “high rank created an obligation to great gifts.”

94 Earle (1994) and Earle (2002). Moreover, the emphasis with wealth finance is on sumptuary goods, much like the Indian spices that Priscus “offered” to the qagan of the Avars in 598.

95 Rudnicki (2009–2010); Bliujienė/Curta (2011). See also Quast (2018).

96 Mikhailova (2016).

97 Curta (2012).

98 Shcheglova (1990); Ailincăi et al. (2014).

99 Ambroz (1968); Kazanski (2017).

100 Ambroz (1970).

101 Akhmedov (2014b) and Akhmedov (2016b).

102 Tóth (1999); Vida (2000); Hilberg (2003); Kazanski/Mastykova (2005); Vida (2005); Quast (2008). For contacts with Italy, see Stein (2005). For contacts with Scandinavia, see Quast (2004); Magnus (2006); Magnus (2007); Hilberg (2009), 196–204; Kazanski (2010b); (2010). For contacts with the Caucasus region, see Gavritukhin/Kazanski (2010). For very long-distance contacts, see Gil (2014).

was primarily used to establish marital alliances.<sup>103</sup> Much more attention has been paid to the objects themselves than to the social context in which they appear and were most likely exchanged. How did the objects move or, more importantly, with whom did they travel at long distances? How was the value of those objects communicated to the recipient?<sup>104</sup> How were such “exotic” objects used to build social prestige with the recipient’s group? Were there any differences between the social value of the exchanged object in the societies of the sender and recipient, respectively? Given the current state of research, none of those questions can be answered satisfactorily.<sup>105</sup> Nonetheless, it is simply not true that “gift-exchange ... was seldom large-scale enough to characterize whole systems.”<sup>106</sup> The considerable extent of the network established by means of wealth finance bespeaks the importance of such exchanges for early medieval elites. In Eastern Europe, they were an important element of social differentiation within “whole systems.”

103 Koncz (2018). As Sahlins (1972), 220 has put it, “balanced reciprocity is the classic vehicle for peace and alliance contracts”; see also Sahlins (1972), 222–30 for marital alliances.

104 This raises another very important question: what language(s) were used for wealth finance? Exchanges seem to have been eased by shared culture and similar languages; see Whitaker et al. (2008).

105 There has so far been no attempt to apply social network analysis to wealth finance in 6th- to 7th-century Eastern Europe. Such an approach may reveal degrees of mutuality and propinquity, as well as nodes and structural holes in the communication network. For an example of successful application of network analysis to wealth finance, see Mizoguchi (2013).

106 Wickham (2006), 695.

## Social Change

The archaeological excavations carried out in 2002 on the southwestern outskirts of the village of Röösa on the southern coast of the island of Saaremaa (Estonia) brought to light the remains of a rectangular stone building. Inside it, there were four spearheads, a seax, a shield boss, a bronze buckle, and potsherds of small earthen vessels—all mixed with poorly preserved human bones. The latter belonged to several individuals, but archaeologists have retrieved only a few parts of each skeleton.<sup>1</sup> On the basis of the associated artifacts, the building has been interpreted as a late 5th- or 6th-century mortuary house associated with the cult of the (local) ancestors, whose de-fleshed remains were brought from elsewhere and (re)buried in the house.<sup>2</sup> As such practices have a long tradition on Saaremaa stretching back to the Bronze Age, the mortuary house reflects a society that was predominantly shaped by family or clan affiliation, in which individuals were not very significant.<sup>3</sup>

The archaeological record of Estonia is rarely, if ever compared to that of the Roman provinces in Late Antiquity. However, the parallel to the mortuary house discovered in 2002 that immediately jumps to mind is an ossuary discovered at the opposite, southern extreme of the part of Europe in the focus of this book. The *osteotheke* discovered in 1947 at the foot of the Acropolis in Athens, on its eastern side (near the western end of the modern Sophroniskos Street) was a vaulted, built tomb with several skeletons buried together with a great number of pitchers, amphorae, and jars, as well as seven gold coins, the latest of which is a solidus struck for Emperor Maurice between 583/4 and 602.<sup>4</sup> Nothing is known about the exact number of individuals buried in the *osteotheke*, or the relations between them. However, much like in the case of the mortuary house on Saaremaa, the tradition of a multiple burial within one and the same ossuary goes back to Antiquity. During the 6th century,

1 Mägi (2003), 45–46, 49 fig. 2, and 53–54, who notes that the dispersion of bones and artifacts strongly suggests that they were all initially buried in a box made of some perishable material.

2 Mägi (2006), 61. No DNA analysis of the skeletal remains has been done, in order to establish whether the individuals buried in the mortuary house were genetically related.

3 Mägi (2005). The mortuary house discovered in 2002 near Röösa has a good parallel at Paju (western Saaremaa), which is also dated to the 5th or 6th century; see Mägi (2003), 55.

4 Threpsiadis (1971), 10–11. For the coins, see Mina Galani-Krikou et al. (2006), 54; Morrisson/Popović/ Ivanišević (2006), 225.

family vaults were common in Greece, as well as on the western coast of the Black Sea and in the interior of the Balkan Peninsula. In such tombs, the bodies were laid on ledges along the walls or inside the funeral chamber(s). Moreover, the walls were often painted. For example, in Louloudies, a vaulted tomb discovered next to the southwestern corner of the basilica had murals depicting large foliate Latin crosses.<sup>5</sup> That similar tombs found on the Black Sea coast in Romania served as family vaults results from the anthropological sexing and ageing of skeletons. For example, the barrel-vaulted tomb found in Cernavodă (western Dobruđa) contained five skeletons—two men, two women, and one child.<sup>6</sup> Simpler versions without murals, such as found in Nea Anchialos (near Volos, Greece) or Slatino (near Brod, Macedonia) were also employed for multiple burials, most likely of members of the same family.<sup>7</sup>

One of the most extraordinary 6th-century sites in Greece is the cave found on the slopes of Mount Zavitsa between the villages of Andritsa and Velanidia near Lerna (Argolis). The speleological exploration and archaeological excavations carried out in 2004 and 2005 inside the cave have identified 33 skeletons, many of them of children and teenagers. Several of them were laid directly on the ground around a stalagmite, an arrangement imitating the layout of a burial chamber with bodies placed on ledges along the walls.<sup>8</sup> It is impossible for the moment to establish the kin relations between the individuals buried in the Andritsa Cave. In the Crimea, it was relatively common to carve into the rock cave-like burial chambers for multiple burials of individuals, most likely members of the same families, laid next to, but also on top of each other, in layers. A great number of cemeteries in the mountains consist of burial chambers, each with a large, rectangular room and with numerous skeletons.<sup>9</sup>

5 Marki (1997). For the accompanying inscription, see Kiourtzian (1997), 31–32. For other 6th-century vaulted tombs with murals, see Gkini-Tsophopoulou (1990); Pazaras (2001); Marki (2001), 274 and 276 fig. 3; Paliouras (2004), 58–59.

6 Rădulescu/Lungu (1989), 2578, 2582, and 2584–87. There were 11 skeletons in the vaulted tomb found in Mangalia, for which see Pillinger (1992), 99–102. Vaulted tombs with murals dated to the 6th century are also known from the interior of the Balkan Peninsula, but no skeletal remains have been found in any of them. See Gerasimov (1966); Gerasimov (1976); Lilčić (1981); Rakocija (2004); Nallbani (2007), 50; Milinković (2014), 41 and 36 fig. 28. Only a few bones have been retrieved from the vaulted tomb found in Mariolata (Greece), for which see Mailis (2001), 312–14.

7 Sotiriou (1956), 113–15; Babić (1980), 31–33. The same is true for the vaulted tombs discovered in Morodvis (Macedonia) and Stranjani (near Zenica, in central Bosnia); see Paškavalić (1959), 155; Trajkovski (1989).

8 Kormazopoulou/Chatzilazarou (2005), 24–47.

9 Repnikov (1932); Veimarn (1963); Loboda/Choref (1974); Loboda (1976); Omel'kova (1990); Veimarn/Aibabin (1993); Aibabin/Iurochkin (1995); Ushakov/Filippenko (2004); Aibabin/Khairedinova (2009); Aibabin/Khairedinova (2014); Bemann et al. (2013); Turova/Chernysh

Masonry family vaults, some of them with murals, have been found in the cemeteries of such urban centers as Chersonesus and Bosphorus.<sup>10</sup> As in Greece, burial in multi-generational family vaults has old traditions.<sup>11</sup> Although family or clan affiliation seems to have been a paramount concern, there are clear and sharp differences between individuals buried in different vaults or even between those buried within one and the same vault. Perhaps the most interesting aspect of the social differentiation apparent in the archaeological record of 6th- to 7th-century cemeteries is the abundance of dress accessories in female graves, in as great numbers and specific combinations as to make Elzara Khairedinova postulate the existence of a specific “female costume” of the mountain population in the Crimea.<sup>12</sup> Even more significant is that that “costume” was given in death to children (most likely girls), an indication of status bestowed by surviving members of the family.<sup>13</sup> By contrast, only a few men were buried in family vaults together with their weapons.<sup>14</sup> Moreover, swords appear in separate grave pits (as opposed to family vaults) only in Kerch, where the tradition of high-status male burials with weapons goes back to the late 4th century.<sup>15</sup>

Mortuary archaeology in the Balkans has produced evidence of stone-lined graves and burials with pitched tile covers, often in relatively large numbers grouped around a cemeterial church or chapel.<sup>16</sup> Since in some cases,

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(2015). Skalyste (near Bakhchysaray) is the site with the largest number of burial chambers dated to the 6th or 7th century (485). The largest number of individuals buried within one and the same family vault is 22 in burial chamber 54 discovered in Luchyste (near Alushta); see Aibabin/Khairedinova (2014), 65–77. For burial chambers in Crimean cemeteries as family vaults, see Jacobi et al. (2013), 348.

10 Zubar’/Pillinger (2000–2001); Zubar’ (2002); Khrushkova (2008); Zavadskaiia (2009); Zubar’ (2009). For the cemetery excavated in Kerch (Bosphorus), see Zaseckaia (2003). As Fomin (2011) points out, much like in the mountains, family vaults came into use in urban cemeteries in the 4th century and continued well into the Middle Ages.

11 Aibabin (2013), 379.

12 Khairedinova (1999); Khairedinova (2000); Khairedinova (2002); Khairedinova (2007); Khairediov (2010).

13 Khairedinova (2007), 25–26, 43 fig. 16, and 44 fig. 17.

14 Veimarn/Aibabin (1993), 25, 103, 116, 121, 126 and 155; 26 fig. 14/18; 105 fig. 75/27; 116 fig. 84/12; 122 fig. 89/20, 22; 125 fig. 92/18; 149 fig. 110/13; Zaseckaia (1997), 446–47; 471 pl. xv/4, 7–9; 475 pl. xix/27; Aibabin/Khairedinova (2014), 59 and 179 pl. 31/1.

15 Kazanski (2018).

16 Marušić (1956); Miletić (1956); Miletić (1975); Slabe (1975); Miletić (1978); Ercegović-Pavlović (1980); Preda (1980); Stare (1980); Šonje (1980–1981); Bolta (1981); Tabakova-Canova (1981); Toropu (1981); Brukner (1982); Maneva (1985–1986); Boltin-Tome (1986); Ivanovski (1986), 124; Paprenica (1986); Petre (1987); Marin (1989); Simoni (1989); Vaklinova (1989); Ujčić (1992); Jeremić (1994–1995); Bospachieva (1998); Gatev (1998); Toska/Chatzakis (2001); Koicheva (2002); Daskalov/Trendafilova (2003); Snively (2003); Bitrakova-Grozdanova

cemeteries were found next to forts, those buried there must have been members of the military. The same may be true for similar cemeteries found near such cities as Heraclea Lyncestis (now Bitola, Macedonia) and Iustiniana Prima (Caričin Grad, Serbia). Dress accessories and jewelry associated with some of those burials indicate the presence of women, perhaps wives of soldiers in the city or fort garrisons.<sup>17</sup> However, the general appearance of those grave goods is rather modest, especially when compared with the rich artifacts found in family vaults. Moreover, with a few, but notable exceptions, men were rarely buried with weapons in individual graves.<sup>18</sup> The exceptions are located on the northern and northwestern frontier, at Viminacium (now Stare Kostolac, in Serbia), Singidunum (now Belgrade), and in Istria. Burial assemblages from those sites contain swords, seaxes, lance and arrow heads, shield bosses, and even armor plates.<sup>19</sup> Such an abundance of weapons deposited in male graves is unusual and deserves explanation. Mesmerized by such artifacts as bow fibulae found in female graves, archaeologists have rushed to attribute those cemeteries to barbarians federates, and debated whether the specific group to which they may have belonged were the Gepids or the Herules.<sup>20</sup> Many overlooked the striking gender imbalance most visible in the latest phase of each one of those cemeteries. For example, out of 69 burials found in the cemetery excavated in Više Grobalja (Viminacium II, south from the Roman city) and dated between the late 5th and to the 6th century, more than half are of men, with only

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(2006); Marki (2006), 197–204; Jurčević (2007); Chamilaki (2009); Chamilaki (2010); Gkini-Tsophopoulou/Giankaki (2010); Popović (2017). See also Laskaris (2000); Rusev (2012).

- 17 Much like in the Crimea, the lavish display of ornaments in graves of women has led to the idea of a specifically (north) Balkan, “barbarian” female costume. See Stanev (2012).
- 18 Agallopoulou (1975); Ivanov (1997); Daskalov/Trendafilova (2003), 149–50; Khrisimov (2008), 52–54.
- 19 Marušić (1962), 455–61; pl. 1/5; pl. 111/2; Marušić (1979), 112; Torcellan (1986), 64, 72–74, and 77; pl. 4/9; pl. 11/3, 4; pl. 25/10; pl. 26/9, 10, 12, 13; pl. 28/4, 8, 11; pl. 32/13; Ivanišević/Kazanski (2002), 128, 133, 139, 163 and 168; 150 pl. 11/6.2–4; 153 pl. v/56.1–5; 156 pl. viii/103.1; Ivanišević/Kazanski/Mastykova (2006), 162, 164, 166, 168, 170, 174, 176, 177, 182, 188, 190, 194, 196, 198, 203, 216, 218, 220, 222, 223, 229, 230; 163 pl. 11/T103.1; 165 pl. 12/T113.5, 6, 8, 10, 11; 167 pl. 13/T115.1, 3, 8–10; 171 pl. 15/T118.1; 172 pl. 15/T120.1, 3; 175 pl. 18/T121.5, 7, 9; 182 pl. 22/T123.3 and T129.5; 183 pl. 23/T127.1 and T135.4; 190 pl. 26/T143.3; 191 pl. 27/T142.5; 192 pl. 28/T145.3, 8–19; 197 pl. 30/T149.2; 199 pl. 31/T152.4, 6–10; 206 pl. 33/T572.7; 217 pl. 36/T1876.1, 2; 219 pl. 39/T2047.1–9; 221 pl. 41/T2083.6; 224 pl. 42/T2093.1; 227 pl. 44/T2142.6; 231 pl. 45/T23.6; 233 pl. 46/1–5. For other burial finds in the hinterland of Viminacium, see Cunjak (1992), 35–37; pl. 11/1, 2; Ivanišević/Bugarski (2018), 101 and 102 fig. 9/3, 4. See also Bugarski/Ivanišević (2018), 293–309 and 318–319 table 1.
- 20 Zotović (1992); Ivanišević/Kazanski (2010).

15 women and 7 non-adults.<sup>21</sup> Judging from the distribution of weapon graves within the cemetery plan, it is quite clear that its organizing principle was not family affiliation.<sup>22</sup>

This is in sharp contrast to cemeteries in *barbaricum*, immediately next to the northern frontier of the Empire, with which the weapon graves in Viminacium and Singidunum are often compared.<sup>23</sup> For example, at Kormadin, a 6th-century cemetery excavated on the western outskirts of Belgrade, half-way between the villages of Surčin and Jakovo, a man buried in grave 2 together a sword and a quiver with 12 arrows was surrounded by graves of two women and a child.<sup>24</sup> He may well have been the head of a family. Farther afield, new studies employing molecular anthropology have substantiated such an interpretation. At Szólád, on the southern shore of Lake Balaton, four kindreds were buried within a relatively short period within the 6th century. One of them spanned three generations and therefore included ten individuals, who were buried next to each other in elaborate ledge graves and with many grave goods. Six males of that kindred were given edged weapons, despite three of them being teenagers at the time of their death. Unlike most other people buried in the Szólád cemetery, the adult males in that group had access to a diet particularly rich in animal protein. One of those males was buried in the deepest pit of the cemetery, together with a horse, a clear indication of a special status. Surrounding that tomb were the graves of the man's father, sister, child, and distant relatives.<sup>25</sup> That this was the most prominent kindred of the

21 Mikić (1992–1993), 192 notes the great disparity between male and female graves, but without any comment.

22 Grave 115 was the tomb of a man buried with a sword, a lance head, and a bridle bit; see Ivanišević/Kazanski/Mastykova (2006), 166. According to the cemetery plan published by Bugarski/Ivanišević (2018), 301 fig. 5, he was surrounded by other male burials (114, 116, 123, 152, 352 and 357), two of which also produced weapons. Grave 56 found in Belgrade—the only one with a sword—was isolated on the southern edge of the cemetery, with only a four year-old child buried nearby; see Mikić (2007), 11 pl. 5.

23 For weapon graves in the Carpathian Basin, see Cseh (1989); Keresztes (2015); Keresztes (2017).

24 Dimitrijević (1964), Y59. For the position of the grave within the cemetery, and the surrounding graves, see Dimitrijević (1960), 10 and pl. 2. A sword, a lance head, a shield boss and a luxury helmet have been accidentally found during World War II on the north-western outskirts of Belgrade, at Batajnica. They most likely belonged to one and the same burial assemblage, but whether that was an isolated grave or part of a cemetery remains unclear. See Vinski (1954); Csallány (1961), 238–39; pl. CCLXXV/8; CCLXXVII/1,3; pl. CLLXXVIII/1, 2; Škrkulja/Gračanin (2014), 19 and 29.

25 Amorim et al. (2018), 6 and fig. 4. For the diet rich in animal protein, see also Alt/Müller/Held (2018). For the cemetery, in general, see Freeden (2008).



community results from the fact that most other graves in Szólád have fewer or no goods at all.

Even in poorer cemeteries the organizing principle was family affiliation. The analysis of the epigenetic traits of the 20 skeletons excavated in Gorenji Mokronog, at the foot of the Trebelno Mountain (central Slovenia) has shown that all were members of the same kin group.<sup>26</sup> Similar conclusions may be drawn from the analysis of 5th- to 7th-century cemeteries in the Sambian Peninsula (now within the Kaliningrad region of Russia). No richly furnished burial of a male found in that northern part of Eastern Europe was isolated. All were located within small cemeteries that could easily be compared to Szólád or Gorenji Mokronog, except for the use of cremation. The male graves were surrounded by burials of people of lower social status, judging from the fact that few, if any of them were accompanied by grave goods.<sup>27</sup> Those were most likely family groups.

No rich male graves, and no signs of social differentiation are so far known from any burials under the so-called “long barrows” of northwestern Russia and Estonia. However, it is quite possible that each one of them represented the North European equivalent of the family vault in the south. Unlike the latter, the long barrows had no local traditions and must have been a major innovation for the local population in the forest belt.<sup>28</sup> Family affiliation was also the principle behind the organization of the small cemetery discovered at Bartym, in the Perm region of the Far East of Eastern Europe.<sup>29</sup> Out of 19 graves, 13 were multiple burials, with one of them including 9 individuals—a situation directly comparable to the family vaults of the Balkans and in the Crimea. Slightly less than half of all bodies buried in Bartym are of children, many of them aged between 2 and 9. Among the identified adults, there are as many men as women. Such multiple burials have rightly been interpreted

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26 Leben-Seljak (2003), 411 and 414. For the cemetery, in general, see Bavec (1999) and Bavec (2003). Besides fragments of two glass beakers found in the grave of a two year-old child, there are no other markers of social distinction. The oldest man in the cemetery (41 to 60 years at the time of death) was buried with no grave goods whatsoever.

27 Cremated remains cannot be analyzed by means of molecular anthropology, as no collagen may be extracted from bone material exposed to high temperatures that have modified the bone tissue. It is therefore impossible to establish the relation between the men buried with many grave goods of high value and the individuals buried next to them, but without any grave goods. Nonetheless, it is important to note that the cremated remains of important men were sometimes buried in wooden boxes; see Skvorcov (2013), 360–61.

28 For the absence of any elite or military assemblages in the area of the Long Barrow culture as a sign of an “egalitarian” society, operating in much the same way as others farther to the south in Belarus, see Mikhailova (2015a).

29 Goldina/Vodolago (1984).

as “fragments of families.”<sup>30</sup> An arrow head placed next to the skull of a 35 to 45 year-old man in the multigenerational grave with 9 individuals is the only weapon recorded in Bartym, and nothing indicates that that man (one of three buried in that grave) held any special position in society.

It is against this vast canvas of “old” Eastern Europe, in which the position in society was determined by family or clan affiliation that the weapon graves in Viminacium and Belgrade appear as a new phenomenon. Similarly, in Estonia, where during the 6th century mortuary houses were for the last time used to bury family members together, the dead were now laid to rest in individual stone circle graves, one person in each.<sup>31</sup> Lavishly furnished cremations, such as found in northern and northwestern Estonia were often accompanied by weapons.<sup>32</sup> The phenomenon, however, is general for the entire Baltic region. Eugenijus Jovaiša even called the 6th century “the period of the war elite.”<sup>33</sup> Judging from the number and quality of grave goods, at the same time as a few rich weapon graves appear in northern and northeastern Estonia, in eastern Lithuania there is a clear reduction of the segment of population representing the elite buried under barrows.<sup>34</sup> By 500, burials of young men were considerably richer than those of old men, an indication of profound social change.<sup>35</sup> Moreover, this phenomenon was accompanied by a substantial increase in the number of people buried with no goods.<sup>36</sup> Mortuary houses and stone circles were abandoned in the mid-6th century in coastal Lithuania (Curonia) in favor of individual graves. At the same time as family burials disappeared, social

30 Goldina/Pastushenko/Chernykh (2013), 898.

31 Mägi (2003), 55, who notes, however, that even the mortuary house at Lepna represents an innovation, at least in terms of the number of weapons deposited. Moreover, many grave goods were intentionally damaged, a practice that actually began in the 5th and 6th centuries and continued during the subsequent centuries.

32 Moora (1967); Lõugas (1973); Mandel (1983); Selirand/Deemant (1985). See Laul (1985), 76 and 78; Mandel (1995), 113; Quast (2004), 268. Ligi (1995), 228, notes that the richly furnished graves appeared in northern Estonia at the same time as the long barrows in southeastern part of that country (even though the latter are associated with a society without stratification).

33 Jovaiša (2006), 7–12 and 14. For the shift towards individual graves, see Simniškytė (2013), 87–91. For warrior elites, see Vaitkunskienė (1995). For Lithuania, see Kazakevičius (1986); Vaškevičiūtė (1986–1987); Kazakevičius (1988); Šimėnas (1991); Kazakevičius/Malonaitis (2006); Vaškevičiūtė (2007); Kiulkys (2010).

34 Tautavičius (1959); Dakanis (1987); Vaitkevičius (2005); Bliujienė/Curta (2011); Kurila (2016).

35 Kurila (2009), 170.

36 Kurila (2015), 58 fig. 8 and 59 fig. 10. With male burials, the main difference between the period 200–400 and the period 400–600 is the sudden appearance during the latter of a large number of graves without any grave goods.

stratification became increasingly apparent in both male and female burials.<sup>37</sup> The remarkable cluster of dagger finds in central Lithuania has been interpreted as signaling the appearance of retinues of “professional” warriors.<sup>38</sup>

During the 6th century, a number of radical transformations are visible in the taiga region of Eastern Europe as well.<sup>39</sup> In cemeteries excavated in the valley of the river Sylva, to the southeast from Perm, males were buried under barrows together with edged weapons, horse gear and bone arrow heads.<sup>40</sup> Barrows disappear after ca. 600, but the deposition of weapons in male burials continued.<sup>41</sup> By then, however, the richest graves were those of women, often buried with a large quantity and great variety of dress accessories and trinkets.<sup>42</sup> Similarly, in the central part of the forest region of Eastern Europe, a great number of “imports” from Central Europe and the Caucasus region appear in the late 5th and during the 6th century. This was the period of the greatest display of martial qualities through the deposition of weapons in male burials.<sup>43</sup> Moreover, during the 6th and early 7th century, sets of female dress accessories began to appear in male burials, apparently as “gifts.”<sup>44</sup>

There is therefore a general wave of social change, primarily reflected in the move away from family burials to a stronger emphasis on personal achievement and the role of men as community or military leaders. Many of the men buried with weapons in the Baltic region, the Carpathian Basin, the central part of the forest belt or in the taiga belt of Eastern Europe were “new men,” whose social position was not determined by birth, but by self-achievement.<sup>45</sup>

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37 Bliujienė (2016), 275 and 277.

38 Bertasius (2016), 231.

39 Erdélyi/Ojtózi/Gening(1969);Goldina/Koroleva/Makarov(1980);Semenov(1980);Goldina/Vodolago (1984); Goldina/Vodolago (1990); Mingalev (2007); Goldina/Pastushenko/Chernykh (2011).

40 Kovtun (2010), 49 notes that the bows and the arrows deposited in male burials were markers of a “professional status,” namely that of hunter (but also warrior). For rare finds of helmets, see Akhmedov (2017); Negin (2018).

41 Polesskikh (1968); Ovsiannikov (1998), 296.

42 Goldina (2012), 203; Kovtun (2010), 47 fig. 2.

43 Akhmedov/Belocerkovskaia (1996), 132–35.

44 Belocerkovskaia (1997). Akhmedov/Belocerkovskaia/Rumianceva (2007), 150 and 201 note that the status of children buried with swords longer than their own bodies (e.g., in grave 43 of the cemetery excavated in Nikitino near Riazan’) must have been ascribed by their families. Changes happened so abruptly that the explanation favored by Russian archaeologists is a migration of a few warriors from the Danube region.

45 Dzino (2014), 136, who applies those remarks to 6th-century cemeteries in Dalmatia and its hinterland. However, with the exception of Rakovčani, no weapons were found, and no sharp gender differences existed in any of them. When men were buried with any grave goods at all, those were belt buckles or knives, as in Mihaljevići and Kašić. See Miletić

The change in burial customs towards a strong emphasis on weapons was most likely associated with societies that may be described as warrior-oriented. However, the signs of a new era of individualism are apparent even in contexts where warrior status was of no concern. A vaulted tomb built at the eastern end of the southern aisle of the episcopal basilica in Stobi (Macedonia), following its restoration in the first half of the 6th century, was used not for a family, but for single individual. The man, who died in his 40s or 50s, was buried dressed in a robe and wearing leather shoes, but without any grave goods.<sup>46</sup> Whether or not this was the tomb of Bishop Philip of Stobi, who is known to have paid for the building of the episcopal basilica, burying important persons in vaulted tombs inside or close to the church was a practice that is attested in Greece even before 500. On the basis of a few surviving inscriptions, Carolyn Snively has advanced the idea that burial in (urban) churches was a privilege of the clergy.<sup>47</sup> The implication is that members of the clergy were entitled to burial inside the church, because that was an attribute of their social group. However, not all members of the clergy were buried inside churches. Moreover, the grave goods found in one of the two vaulted tombs in Stamata strongly suggest that wealthy female donors could also have been given such a treatment in death.<sup>48</sup> That burial inside the church was less a matter of membership in a social group, and more a question of personal merit results also from the widespread practice of euergetism and commemoration of generous donors, including women.<sup>49</sup> One of the richest burial assemblages from the 6th-century Balkans is the tomb of a woman inside or next to a martyrion in Gračanica (Lipljan, Kosovo).<sup>50</sup> Because of the pair of Scandinavian brooches, but also of the freshly minted solidus of Justinian (dated after 538), all of which were found in the grave, Mihailo Milinković has interpreted the burial assemblage in Gračanica as a case of advanced acculturation.<sup>51</sup> However, such an

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(1956), 14, 15 and 17–18; pl. I/1, 10; pl. II/4; Belošević (1968), 239 and 240–41; pl. VII/13, 14; pl. IX/1. For axes found in Rakovčani, see Miletić (1975), 178 and 180; pl. I/1; pl. III/13.

46 Veljanovska (1987). Tombs inside churches are also known from Gela (near Smolian, southern Bulgaria) and Nicopolis (Epirus, Greece). See Vaklinova (1999), 59–60; Snively (2007), 746.

47 Snively (1998), 494–95. For privileged burial in churches, see also Marano (2018).

48 Gkini-Tsophopoulou (1990), pl. 41. The Stamata vault was built inside a basilica, on the northern side of the nave. For the associated pottery, see Gkini-Tsophopoulou/Chalkia (2003). For other examples of female burials inside churches, see Gkini-Tsophopoulou (2001), 152; Poulou-Papadimitriou/Tzavella/Ott (2012), 384.

49 For female donors in the 6th century, see Feissel/Philippidis-Braat (1985), 374; Moutzali (2002), 179; Paliouras (2004), 56; Handley (2010), 123 and 137.

50 Popović/Čerškov (1956); Milinković (2003).

51 Milinković (2002), 352.

interpretation is rooted in the obsessive preoccupation with establishing the ethnic identity of the deceased, under the assumption that the artifacts found inside the grave were those that she had worn during her lifetime. In reality, those artifacts were placed in the tomb by those who have buried the woman inside or next to the martyrium. In doing so, they certainly had no intention to associate her (and her grave) with her family or ethnic group. Judging by the existing evidence, she was buried there because of her own merits, whatever they may have been, or because she was regarded as particularly important, in her own right, by local Christians.

Family vaults continued to be built in the 7th century in Greece (Corinth and Nea Anchialos), as well as on the western coast of the Balkan Peninsula (Šas in Montenegro and Durrës in Albania).<sup>52</sup> Cemeteries in northern Albania begin in the late 6th century with elite family burials, which consist of stone structures with multiple compartments for each individual.<sup>53</sup> However, at Kruje, a grave was found in an isolated position, away from the cemetery excavated just outside the walls of the medieval castle. That was the tomb of a woman buried in a sumptuous dress with a pair of silver bow fibulae and a buckle with a monogram of the Christian phrase “Lord, have mercy.”<sup>54</sup> Two other graves in the 7th-century Balkans are equally unusual by combining local burial traditions, but including “exotic” artifacts that have been interpreted as barbarian. The most famous 7th-century male burial in Greece is the stone-lined grave of the “wandering soldier” discovered in 1938 in the colonnade of the South Stoa in Corinth.<sup>55</sup> The belt buckle found under the last vertebra has good analogies in female burial assemblages of the Early Avar age in Hungary and the bronze trinket with lozenge-shaped pendants placed in the deceased man’s right hand was an equally female piece of jewelry with known parallels in 7th-century barrows in Latvia and Lithuania, as well as in the Smolensk region of Russia. Nonetheless, single amber beads, such as found in the “wandering

52 Sotiriou (1935), 60–64; Williams/Macintosh/Fisher (1974), 9–10; Tartari (1984), 230–31 and 241; Milinković (2005), 315. The vaults in Durrës and Šas are the largest so far known from the late antique Balkans, each with 30 skeletons.

53 Nallbani (2004a), 487; Nallbani (2007), 56 and 252 fig. 12. Nallbani believes that such graves represent the kin groups that controlled the forts and towns in (or next to) which the cemeteries were established. Some were buried together with weapons. See Nallbani (2003), 114–15 for one of the earliest swords found in northern Albania. For arrow heads deposited in graves, see Agolli (2006).

54 Anamali/Spahiu (1963), 16 34–35, 57–58, fig. 13 and pl. 12/2. For the pair of fibulae, see Curta (2011d), 66–67. For the buckle, see Anamali (1993), 443 and 445 fig. 4/2. Curta (2005b), 127 notes that the combination of fibulae and buckle is very rare in the western or southern Balkans.

55 Davidson (1974).

soldier” grave appear during the Early Avar period in Hungary primarily in very rich, male burials. The same is true for the double-edged sword with cross-bar, very similar to specimens found in burial assemblages in Hungary that have been dated to the mid-7th century.<sup>56</sup> A unique assemblage was recently found during salvage excavations in Davidovac (near Vranje, southeastern Serbia) that brought to light the grave of a 30 to 40-year old man. He has been buried together with a belt set with good analogies in rich, male graves of the Early Avar age, but also with a purse buckle with analogies in the Mediterranean region.<sup>57</sup> The only weapon in the grave was a hammer-butted axe, with good analogies in northern Albania dated to the same time, as well as in somewhat later assemblages in Hungary.<sup>58</sup> The combination of battle axe and purse buckle also reminds one of male burials from northern Albania.<sup>59</sup> Assessing the significance of the finds in Davidovac against the evidence of weapon burials in the Mediterranean region, Sofija Petković has concluded that the Davidovac grave is the symptom of dramatic social changes taking place in the early 7th century, the most important part of which was the individualization of power.<sup>60</sup>

Early Byzantine sources mention a number of 6th-century warlords in the lands north of the Lower Danube, and the analysis of their actions suggests that those were leaders of different kinds competing against each other, representing highly individualized forms of power. They had to prove themselves constantly, some as military commanders of successful raids into the Balkan provinces of the empire, others by organizing feasts.<sup>61</sup> Some scholars tend to think of the former as “weak” leaders, who were in the end incapable of creating stable polities and succumbed to outside pressure.<sup>62</sup> Others have revived

56 Curta (2016c), 422–23 regards the grave of the “wandering soldier” as a “major innovation in the context of the late antique burial practices in Greece.”

57 Petković/Bugarški/Miladinović-Radimilović (2016), 247–49, 250–53 and 260; 248 fig. 1; 249 fig. 2; 250 fig. 3; 251 fig. 4; 252 fig. 5; 254 figs. 6–7; 255 fig. 8; 156 fig. 9. The best analogy for the Davidovac purse buckle is that found in the basilica in Arapaj, on the southern outskirts of Durrës, in Albania. See Hidri (1991), 216 and 229 pl. XI/12.

58 Papp (1963), 126 and pl. VII/16; Anamali (1971), 217 and pl. 1/3; Prendi (1979–1980), 127 and 162 pl. XVI/16; Fancsalszky (1999), 116 and 117 fig. 8/46.3. For Avar-age hammer-butted axes, see Szücsi (2012), 126.

59 Anamali (1971), 217; pl. 1/3; pl. VII/2, 3.

60 Petković/Bugarški/Miladinović-Radimilović (2016), 270.

61 Curta (1999).

62 According to Hardt (2016), the Slavic warlords were leaders of “failed states.” This is in fact a variation of the 19th-century idea that the Slavs were incapable of governing themselves and had to be ruled by non-Slavic outsiders. For a recent reiteration of that idea, see Urbańczyk (2002). Homza (2018) believes that the Slavs were secret brotherhoods

the Soviet-era interpretation of early Slavic society as “military democracy,” the transitional stage from kin-based societies to state societies.<sup>63</sup> However, what makes warfare a useful tool for ambitious leaders is the possibility of creating debts, particularly when compensating losses through economic surplus, under the assumption that a human life could be substituted by the value of economic surplus.<sup>64</sup> Such a mechanism for the rise of great men is evidently at work in the episode of the “phony Chilbudius,” an Antian prisoner of war who was ransomed from the Sclavenes by one of his fellow tribesman with political aspirations.<sup>65</sup> Similarly, the emphasis on sharing that results from the intrasite analysis of a number of 6th- and early 7th-century settlement sites in Romania and Moldova can give the impression that there were no true leaders in those communities, since their presence is far from apparent, or indeed necessary in a “self-regulating” society.<sup>66</sup> In reality, feasts create the illusion of equality, harmony, and solidarity, while mobilizing labor in subsistence agricultural communities, and thus promoting and legitimizing status difference.<sup>67</sup> Moreover, competitive feasting commonly appears only where resources are abundant, and conditions are ripe for the development of chiefdoms.<sup>68</sup> Feasts are also key occasions for procuring, displaying and giving away items that are difficult to obtain or for the production of which one needs specialized labor. The intrasite analysis of the 6th- and early 7th-century settlements in Romania and Moldova suggests in fact that supporting local craft specialists (such as those producing jewelry by casting) became an essential feature of feasting.<sup>69</sup> Furthermore, it is simply not true that “the emerging Slavic principalities on

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of warriors, an idea rooted in 19th- and early 20th-century studies of Indo-European mythologies.

63 Gorianov (1939); Labuda (1949); Čilinská (1980), 80; Parczewski (1993), 114; Dvornichenko (2006), 189; Izdebski (2011), 51–56; Zhikh (2015); Kardaras (2017), 250–52 [same text reprinted in Kardaras (2018), 391–92]. For a critique of this model of interpretation, see Curta (2001c), 312–19. See also the pertinent remarks of Lukin (2010).

64 Hayden (1995), 32.

65 Procopius of Caesarea, *Wars* VII 14.11–16, 264 and 266. The Antian tribesman ransomed “phoney Chilbudius” from the Sclavenes “by paying out a large sum of money” in gold (transl., 408).

66 Curta (2001c), 297–307; Măgureanu/Szmoniewski (2003), 123–30; Curta (2017b), 139–41.

67 Hayden (1995), 40; Kim et al. (2016), 129. As Spikins (2008), 188 points out, “sometimes ‘dominance’ may have been little more than people tolerating a boastful individual with power, whom nobody contested out of fear of reprisal; at other times, fear or a quest for power might have had the affiliative relationships within and between groups, tip over into competition, dominance and aggression.”

68 Hayden (1995), 25.

69 Măgureanu (2010), 266 in fact believes that Slavic elites may be identified by means of the archaeological evidence of attached specialists.

the lower Danube had no future of their own in the conflict zone between Byzantines, Avars, and later Bulgars.<sup>70</sup> The archaeological evidence of elite residences, such as found in Copăceanca and Udești (see chapter 8) shows that the raids of the Roman troops into the Slavene territory during the last decade of the 6th century and the first two years of the 7th century had no consequences for the rise of elites and the development of power, despite the elimination of such leaders as Ardagastus, Peiragastus, and Musocius.<sup>71</sup> The same conclusion may be drawn from the analysis of hoards of silver found in Romania and southwestern Ukraine, which most likely represent bribes or gifts from the emperor to local potentates.<sup>72</sup> While little, if any evidence exists of social differentiation in 6th-century cemeteries in the Lower Danube region, the rich female burial from Coșovenii de Jos with its luxury fibula, the torc, and the gilded earrings represents the clear sign of wealth and status, if not of an established aristocracy.<sup>73</sup>

Social change is also visible in Avar-age burials of the Carpathian Basin. It has long been noted that despite the mention in the written sources of a powerful ruler (qagan) named Baian and of leaders and elites under his command, there are no elite graves that could be attributed to the first generation of Avar warriors and therefore dated between ca. 570 and ca. 630.<sup>74</sup> Much like in pre-Avar cemeteries of the 6th century, some men were buried with weapons, particularly in the region between the Tisza and the Danube.<sup>75</sup> However, the cemetery with the largest number of edged weapons is Környe

70 Pohl (2018), 125. That no such “principalities” appear in the written sources pertaining to the 7th century is no indication of their absence. After all, no sources mention the powerful aristocracy of the Middle Volga region that built elite residences, collected tribute, and organized ironworking inside strongholds such as Staraia Maina and Maklasheevka (see chapter 12).

71 As Lutovský (2014), 94, notes, in Bohemia no residence of the (early) Slavic elite has so far been found.

72 Somogyi (2008), 141–42; Gândilă (2018a), 188. Somogyi’s idea (that the hexagrams found in the Lower Danube region represent stipends to the local Slavs, not to the Bulgars) is indirectly confirmed by the absence of such finds from the lands south of the Lower Danube, in the northeastern part of the Balkan Peninsula, where early medieval Bulgaria emerged.

73 Nestor/Nicolaescu-Plopșor (1938), 33–41 and figs. 7–8. For the fibula, see also Curta (1994), 246–47 and 249–50.

74 Vida (2013a), 316. For Baian, see Pohl (2018), 217–19.

75 Balogh (2019), 119, believes that the power center during the Early Avar age was in that region, for some of the weapons found there are ring swords, for the political symbolism of which see Csalog (1959). For examples of rich, early 7th-century burials of warriors in the region between the Tisza and the Danube, see Garam (2005); Balogh/Wicker (2012). See also Szentpéteri (1993), 163 and 165.



(near Tatabánya, to the west from Budapest), and most polearms of the Early Avar age are also from Transdanubia.<sup>76</sup> The practice of burying men with their horses is also typical for that region of present-day Hungary.<sup>77</sup> On the basis of her analysis of the large cemetery excavated at Zamárdi-Rétiföldek (not far from Szólád, on the southern shore of Lake Balaton), Éva Garam noted that in Transdanubia, swords were typically deposited by the human skeleton, while bows and quivers were placed on the accompanying horse skeleton.<sup>78</sup> Others have rightly pointed out that the only Early Avar burials that may be attributed to elites are from Transdanubia.<sup>79</sup> At a closer examination, however, those are female, not male burials.<sup>80</sup> Sword belts decorated with gold or gilded may occasionally appear in graves of men, but the most lavishly furnished are burials of women.<sup>81</sup> That rich female burials were found in large cemeteries, such as excavated in Kölked-Feketekapu (near Mohács, in southern Hungary) or in Zamárdi is an indication that the status of those women depended upon affiliation to prominent families.<sup>82</sup> In fact, Orsolya Heinrich-Tamáška has suggested that the phenomenon was directly associated with the idea, which was common in Late Antiquity, that women were the mirror of the wealth and status of their husbands and families.<sup>83</sup> None of those graves of women could be dated later than the first third of the 7th century. In fact, all traces of elites in Transdanubia disappear after ca. 630.<sup>84</sup> Male burials changed dramatically, as neither swords, nor any other weapons were buried with men anymore.<sup>85</sup>

Shortly before and after the middle of the 7th century, most rich burials were located in the northern part of the region between the Danube and the Tisza rivers.<sup>86</sup> Those were all graves of men, not women. The richest burial

76 Csiky (2015a), 26, 355, 357 and 384, who notes that a relatively large number of edged weapons in Környe (especially short seaxes) were found in graves of infants or juveniles.

77 Bede (2012), p. 43.

78 Garam (2016), 279.

79 Vida/ Pásztor/Fóthi (2011), 416; Schmauder (2015), 678. The only family vault known so far from territories outside the empire has been found at the western end of Lake Balaton, in Keszthely; see Müller (2002a). Vida (2008), 31 believes that the high-ranking members of the local elite were buried inside the basilica at Keszthely-Fenékpuszta, while graves of less influential aristocrats were in the cemetery by the *horreum*, and commoners were buried beside the southern wall of the late antique fort.

80 Vida (2009).

81 Vida (2008), 29.

82 Kiss (2001); Bárdos/Garam (2009); Balogh (2018).

83 Heinrich-Tamáška (2011), 102.

84 Vida (2008), 31; Heinrich-Tamáška (2011), 103.

85 As Garam (2016), 279–80 points out, all other weapons (bows, arrows, and lances) were now deposited next to the accompanying horses.

86 Balogh (2019), 132 fig. 1.

assemblage of the entire Avar age was discovered at Kunbábony (now in Kunszentmiklós, in central Hungary) and has been interpreted as the grave of a lord born during the Early Avar age, possibly one of Baian's sons who ruled as qagan.<sup>87</sup> The large amount of gold (for a total weight of about 5 lbs), in the form of belt fittings, earrings, finger-rings, bracelets, sword ring-shaped pommels, bow trimmings, a jug, a bugle, mounts for wooden vessels, and foil ornaments is a clear indication of wealth. However, the presence among the gold foil ornaments of a lunula-shaped piece with a trapezoidal bottom, originally sewn onto a textile, has led some to the conclusion that those who buried the 60 to 65 year-old man wanted to depict him (and themselves) as heirs of the equestrian herdsmen coming from the East.<sup>88</sup> The pseudo-buckles decorating the belt set found in Kunbábonyi have good analogies in the forest-steppe region of Eastern Europe, around the confluence of the Volga and Kama rivers.<sup>89</sup> However, there are also clear references to Byzantium both in Kunbábony, and in other contemporaneous assemblages, such as Bócsa (near Kiskunhalas, in central Hungary) or Tépe (near Debrecen, in eastern Hungary).<sup>90</sup> The hybrid character of the assemblages in the “princely graves” of the mid-7th century is strikingly similar to the equally puzzling combination of elements from different cultural milieus that is displayed in the much more modest assemblages in Corinth and Davidovac. However, some have rightly suggested that the richly furnished graves of Avar men formed “part of the behavior aimed at stabilizing the internal situation” of the qaganate, which the failed siege of Constantinople in 626 had seriously beset.<sup>91</sup> In other words, Kunbábony represents not only social change, but also a situation of deep crisis.

It is tempting to associate the lavish display of wealth in the Avar-age “princely graves” with a desperate attempt by local elites to project the fiction of power during troubled times. After all, no similarly well-furnished graves are known from the subsequent century of Avar history, which strongly suggests that the “princely graves” were more a symptom of crisis than of long-term

87 Horváth (2019).

88 Stark (2009). Daim (2017b), 412 goes as far as to claim that the burial of the qagan in Kunbábony “deliberately excluded any references to Byzantium.” However, the largest artifact in that burial assemblage is a 13-gallon amphora of the Late Roman 2 type, which probably carried some exotic stuff—Somalian *olibanum*, turpentine, or Arabian myrrh. See Tóth (1986); Curta (2016a), 320.

89 Daim (2017a), 146–47.

90 Chalice: Garam (1993), 107 and 218 pl. 93/1; Prohászka (2010), 248–49; Szenthe/Szőke (2016), 16; Szentpéteri (2018), 43. See also Szentpéteri (1985). For finds of silver plate, see Supka (1913), 397 fig. 1 and 399 fig. 2. For the Byzantine origin of those artifacts, see Mango (1998), 220–21.

91 Schmauder (2015), 679.

change leading to the entrenchment of social classes. Nonetheless, parallel developments were taking place at about the same time in the steppe lands of Eastern Europe. The enormous wealth of the Malo Pereshchepyne burial dwarfs any of the “princely graves” in Hungary: five times more gold than in Kunbábony; a golden, instead of a ceramic amphora; 7 bracelets, three sigillar rings with monogram, three silver pitchers, in addition to 10 gold and 11 silver chalices; and 68 Byzantine gold coins.<sup>92</sup> The latter are either pierced or mounted into sets, but clearly represent (a part of) political payments sent directly from Constantinople. Moreover, the assemblage combines in a unique way elements from different cultural milieus—Central Asian,<sup>93</sup> Byzantine,<sup>94</sup> Sassanian.<sup>95</sup> Even more significant is the presence of female dress accessories in other assemblages, such as the gold earrings and pendants from Hlodosy (near Kropyvnyts’kyi, in Right-Bank Ukraine) and Zachepylivka (near Poltava, in Left-Bank Ukraine).<sup>96</sup>

All these assemblages are in sharp contrast not only with everything else in East Central and Eastern Europe that may be associated with the idea of “individualized power,” but also with all other assemblages in the steppe lands that could be dated to the 6th century. Most of those that appear between the rivers Bug and Volga, as well as along the lower course of the Kuban river were relatively modest graves of men buried with their horses and weapons.<sup>97</sup> The majority were laid to rest in grave pits dug into prehistoric, primarily Bronze-Age mounds.<sup>98</sup> Such burials were still an expression of individualism, as most prehistoric mounds in the steppe lands have no more than one early medieval, secondary burial, while within one and the same group of barrows no more than two received new burials. I have already suggested that such

92 Zaleskaia/L’vova/Marshak (1997); Priimak/Suprunenko (2005); Komar (2006a).

93 L’vova (1998); (2005). See also L’vova (1994) and L’vova (1996b).

94 L’vova (1996a).

95 Trevor/Lukonin (1987), 107, 114–15 and 126.

96 Smilenko (1965), pl. III/1a–b; pl. IV/2–5; pl. V/2; Komar/Khardaev (2012), 260 fig. 9/1–4, 6–7. There are also 17 beads in the Zachepylivki assemblage (15 of glass, one of carnelian, and another of chalcidony).

97 Nonetheless, those men had means to distinguish themselves among others, for example by means of shoe buckles and strap mounts. Some of those dress accessories appear in child burials in Crimea, but in the steppe lands they tend to be associated with artifacts of gold or silver; see Komar (2010), 109. Because of that, Khardaev (2015), 116 believes that the Vasil’evka graves were elite burials.

98 The westernmost are three graves dug into two Bronze-Age barrows on the left bank of the river Inhul, not far from Mykolaiv (Ukraine); see Prykhodniuk/Fomenko (2003), 107. The easternmost are those found on the left bank of the Lower Volga, for which see Sinicyan (1959), 106–07; Rashev (2000), 19–21; Kruglov (2005), 122. For burials along the Lower Kuban, see Atavin (1996), 228–29; Skarbovenko/Lifanov (2012), 29–30.

burial practices may have been connected with claims to the ancestors supposedly buried underneath the mounds (see chapter 9). It is now the moment to point out that those were by no means unique practices.

At Boķi (near Jēkabpils, in central Latvia), the grave of a woman was dug into an Iron-Age barrow.<sup>99</sup> The reuse of prehistoric burial grounds in order to lay claims to the local landscape and its natural, symbolic, and ritual resources is archaeologically documented in the Carpathian Basin as well.<sup>100</sup> In Moravia, for example, prehistoric barrows were chosen for the 6th-century, high status burial of a woman in Źurāň (near Brno),<sup>101</sup> as well as for the 32 graves of the cemetery excavated in Borotice (near Znojmo) and dated to the same time.<sup>102</sup> The cemetery recently discovered in Mušov (near Břeclav, Czech Republic) was established immediately next to a number of graves with stone perimeters that have been dated to the Bronze Age.<sup>103</sup> On the eastern side of the Carpathian Basin, the grave of a man recently discovered during the salvage excavation at Florești, near Cluj-Napoca (Romania) was dug into a prehistoric mound with a stone crown.<sup>104</sup> Prehistoric mounds were targeted for new burials in the western Balkans as well. One of the most conspicuous signs of change in the burials customs of the interior region of Dalmatia is burial in Iron-Age barrows, as in Krneza and Privlaka (both near Zadar, Croatia).<sup>105</sup> The 6th-century cemetery excavated in Korita (near Tomislavgrad, in southwestern Bosnia) was located on the site of a Bronze-Age hillfort.<sup>106</sup> Sixth-century burials in prehistoric mounds have also been documented archaeologically in central Albania, at Klos.<sup>107</sup> When burying in Malai near Krasnodar a man who had died between 35 and 40 years of age, members of his family must have been torn between the old and the new traditions. They placed on his left side a sword with a guard decorated with cloisonné ornament (like those in fashion in the 5th century),

99 Griciuvienė (2007), 35–36; Simniškytė (2013), 110–11.

100 Loskotová (2013), 324.

101 Poulík (1995); Drozdová et al. (2009). The barrows at Źurāň contained Chalcolithic inhumations and late Bronze-Age cremations; see Loskotová (2013), 335. According to Tejral (2009), 138, the woman buried in Źurāň was the Herulian princess Silinga, the second wife of the Lombard king Wacho.

102 Tejral et al. (2011), 75–76. All 6th-century graves were dug into 7 out of 29 barrows of the Bronze-Age cemetery. Some of them (barrow 27) had as many as 12 secondary, early medieval burials, while others (barrows 11 and 13) only one burial each.

103 Loskotová (2013), 325–33. The stones were taken from limestone quarries in the nearby Pálava Hills and recycled for some of the 6th-century burials.

104 Opreanu/Voișian/Bota (2007), 510–11.

105 Džino (2014), 135–36; Džino (2017–2018), 103–04.

106 Marić (1969); Miletić (1978), 141 and 143.

107 Kurti (1971).

but with P-shaped attachment loops like the swords of their own lifetime (6th century). They also decided to bury the man with two bronze cauldrons, one of which was very similar to those of the Hunnic era, but also with a belt with mounts decorated with an open-work ornament most typical for the 6th century.<sup>108</sup> In doing so, those people may have attempted to reconcile tradition and innovation. In the rest of East Central and Eastern Europe, however, most communities felt that social change was coming too fast. They therefore (re)invented a past onto which they wanted to hold.

108 Kazanski (2017), 68; 69 fig. 4; 73 fig. 7.

## Conclusion

For the eastern part of the European continent, the long 6th century was a watershed. It was a century longer than others because the transformations were still going on during the first decades of the seventh century. As a matter of fact, in certain parts of Eastern Europe, the first effects of the turning point became apparent only after the middle of that century. Economically and socially, therefore, by 700 Eastern Europe was very different from what it had been around 500. The transformations taking place in the region between 500 and 700 were far greater than those taking place during the two centuries before 500, as well as those happening between 700 and 900. The long sixth century is the most important period for the transition from Antiquity to the Middle Ages. In Eastern Europe, both continuity and discontinuity apply to that period of transition. Many cities survived and even flourished during the subsequent “Dark Ages.” Cherson and Thessaloniki relied on the salt industry, while Mesembria, Develtos, and Sugdaia (Sudak) became major commercial centers. The interior of the Balkan Peninsula, however, as well as the lands now within Poland experienced a severe demographic collapse. In both cases, what followed the collapse was radically different from what had been in existence in earlier centuries. The establishment of Bulgaria in the Balkans, much like the Avar and Khazar qaganates in the Carpathian Basin and the East European steppe lands, respectively, coincided with a drastic reorientation of the economy, a realignment of rural society, and the rise of completely new social hierarchies. At least in the case of the Balkans, the Middle Ages began in earnest only after 700.

The Roman perspective on Eastern Europe in 6th and early 7th century was essentially peninsular, and in that respect strongly associated to the sea. For both the Istrian and the Crimean peninsulas, the sea was the only link to the center of the Empire. In both cases, that isolation may paradoxically explain continuity. Istria did not suffer as much destruction as Italy during the wars that Justinian waged against the Ostrogoths. Growth and prosperity are apparent throughout the 6th and 7th centuries, and were largely based on agriculture, despite the gradual militarization of the local group of landowners.<sup>1</sup> Much like in the 6th century, *coloni* were the main labor force.<sup>2</sup> No landowning aristocracy is known in the Crimea, despite the prosperity made possible by trade both in the 6th and well into the 7th century. Unlike Istria, that prosperity was

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1 Borri (2010), 5–6; Bileta (2011), 115 and 120.

2 Guillou (2014–2015). For early medieval Istria, see also Ferluga (1992).

largely fueled by fishing, as well as the salted fish industry.<sup>3</sup> The growth of trade in the 7th century results also from the establishment of Sugdaia (now Sudak on the southeastern coast), which was probably the western terminal of the trade routes employed by Soghdian merchants.<sup>4</sup>

In the Balkans, there are no signs of that prosperity, despite clear evidence of continuity on the western coast, in Dalmatia.<sup>5</sup> Despite claims to the contrary, no landowning aristocracy existed in the 6th-century Balkans.<sup>6</sup> The large network of (hill)forts in the central, northern, and eastern parts of the peninsula relied primarily on the *annona*, and on a very low level of agriculture (better described as “gardening”) to supplement the supplies from the outside. The evidence of amphorae shows that the *annona* penetrated deeply into the interior of the Balkan Peninsula, but apparently not to Macedonia. There, local garrisons may have been supplied with goods from Thessalonica, as indicated by the massive presence of coins struck in the mint of that city.<sup>7</sup> However, a little more than a century later, Thessalonica relied on its hinterland for grain supplies, as indicated by the events of 677, when the besieged Thessalonians received supplies of grain from Thessaly.<sup>8</sup> While several crafts continued into the 7th century, the production of salt from pans seems to have meanwhile become quite profitable. In September 689, Justinian II granted all profits from the city’s salt pans to the Church of St. Demetrius as a form of financial assistance.<sup>9</sup> Those in power were not members of the city council, but nota-

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3 Sedikova (2013); Albrecht (2016), 355–62. For early medieval Crimea, see also Sorochan (1995); Aibabin (1997).

4 Vaissière (2006), 179; Shandrovskaia (1995).

5 Gračanin/Kartalija (2018), 366–67.

6 No army officer serving in the Balkans is known to have invested in, or to have owned lands there. There are nonetheless examples of several generations within one and the same family originating from the Balkan provinces of the Empire, such as the family of Justin I or that of Belisarius; see Parnell (2017), 28, 134 and 205.

7 Metcalf (2000), 172–74; Gândilă (2018b), 431–32. See also Hadži-Maneva (2009) and Hadži-Maneva (2009b). For Macedonia in the 6th century, see Irmischer (1993).

8 *Miracles of St. Demetrius* II 4.254, 214; II 4.268, 218. Prior to the siege of 677, a large amount of grain from the public granaries was sold to private merchants at a price of 1/7 nomisma per *modius* (about two gallons). That transaction brought the city a hefty profit of over 7,800 gold coins, the equivalent of over 700 tons of sold grain; see Bakirtzis (2007), 97, relying on the testimony of the *Miracles of St. Demetrius* II 4.244, 211–12. The grain sold before the siege must have come from the outside as well.

9 Bakirtzis (2007), 98; Nigdelis (2007). Thessaloniki was also a trade center, as indicated by numerous seals of *kommerkiarioi* and *abydikoi*. Three different *kommerkiarioi* are known for the early 8th century, followed by ten anonymous seals of the imperial *kommerkia* of Thessaloniki; see Curta (2004), 181–83.

bles, many of whom have profited from trade.<sup>10</sup> Trade was also prominent in Mesembria (now Nesebăr, on the Black Sea coast in Bulgaria). Finds of Glazed White Ware, the staple import from Constantinople for the late 7th century, substantiate the evidence of several seals of general *kommerkiarioi* of the *apotheke* of Mesembria.<sup>11</sup> The picture for the rest of the Balkan Peninsula in the 7th century is very different. Judging from the a few mentions in the second book of the *Miracles of St. Demetrius*, as well as from the numismatic evidence from Athens and Corinth that suggests the existence of food markets for the benefit of sailors of the imperial navy, agriculture was practiced in the hinterland of the coastlands of Greece. Agriculture was most certainly practiced also in the northern part of the peninsula, on sites located on the right bank of the Danube, such as Garvan. Pastoralism, and not the cultivation of crops was the dominant economic activity for communities in the northwestern part of the Balkan Peninsula, along the Mura and Drava rivers in what are now Slovenia and northern Croatia. Meanwhile, archaeological assemblages in northern Albania, northwestern Greece and southwestern Macedonia point to the survival of a numerous post-Roman group, possibly including refugees from the formerly Roman provinces in the northern and central Balkans.<sup>12</sup> Some have even drawn comparisons between the burial assemblages in Albania and those on the Adriatic coast, particularly in Istria, particularly in terms of the deposition of weapons in the graves of leading men.<sup>13</sup> In short, none of the changes predicted by the model of the “transformation of the Roman world” seems to apply to those parts of Eastern Europe that were within the Empire by 500. The main consequence of the deterioration of the state-run system of *annona* was not a drastic decrease of investments in the urban structures. Cities survived, albeit on a reduced scale—in Dalmatia, in Greece, on the eastern Black Sea coast, and in the Crimea. The *annona*, on the other hand, played a key role in the 6th-century Balkans, precisely because it was a response to the inability of the northern provinces in the peninsula to produce the food necessary for the troops coming to their defense. The decline of taxation was abrupt and did not make it possible for farmers to retain the surplus previously paid to the state. By 600, there were no farmers left in the Balkans to take advantage of the supposedly advantageous situation resulting from the inability of the

10 Liebeschuetz (2000); Mentzos (2006), 39–50.

11 Iordanov (2014), 191–93. The *apotheke* of Mesembria is first mentioned on the seal of a *gennikos kommerkiarios* named Cosmas dated to 690/1; see Likhachev (1924), 174–75. See also Shandrovskaia (2006).

12 Popović (1984), 228; Maneva (1996); Nallbani (2004b), 489; Filiposki (2010), 72.

13 Nallbani (2004b), 488–89; Curta (2006c), 100 and 103–04. For the deposition of weapons in early medieval graves of Istria, see Miclaus (2002), 253–60 and 267.



state to collect taxes. The system implemented by Justinian to cope with the deteriorating situation, which is commonly associated with his introduction of the *quaestura exercitus*, was ultimately unsustainable. When Egypt and other provinces fell first to the Persians and then to the Arabs, it became impossible to maintain the military and administrative infrastructure in the Balkans. With the general withdrawal ca. 620, the central and northern Balkans experienced a serious demographic collapse and remained depopulated until at least the end of the century. No Slavs from the territories north of the river Danube rushed to grab the lands supposedly left behind by early Byzantine farmers, and no “remainder” who refused to go away took that opportunity to enlarge his property.<sup>14</sup> The only pocket of population in the interior of the Balkans is that of the so-called Komani culture in northern Albania and the neighboring mountain territories. Next to nothing is known about the economy of those communities, but it is unlikely that they engaged in agriculture on a large scale. Shortly before and after 700, wealth in the Balkans and in the Crimea was not derived from the land, but primarily from other activities, such as local industries and trade. Only in Istria was land still a major source of wealth, but the local aristocracy eventually lost its positions of power in the aftermath of the Carolingian take-over in the late 8th century.<sup>15</sup>

In sharp contrast to the state dependence in the northern and central Balkans is the relative self-sustenance of communities in the lands beyond the rivers Danube and Sava, to the north. The form of itinerant agriculture practiced in southern and eastern Romania in the 6th century took advantage of the fertile luvisols and chernozems in alluvial plains. The abundance of produce made possible by such agrarian techniques is clearly documented in both written and archaeological sources. The Lower Danube region was not the only part of Eastern Europe to experience such abundance. Slash-and-burn agriculture in the Baltic region is most likely responsible both for the successful introduction of rye and for the settlement growth in Estonia. In that case, at

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14 Similarly, the territory of present-day Poland experienced an equally dramatic depopulation in the 6th century. Meanwhile, the Baltic region to the northeast and the Carpathian Basin to the southwest were relatively well populated with farming communities. Yet no expansion took place into the vacated lands of East Central Europe, and no migration either from the seashore or from across the mountains. Whether or not the earliest Slavs of Poland came from Ukraine, it is doubtful that their migration was responsible for the repopulation of the lands between the Oder and the Bug during the subsequent centuries. According to Dulinicz (2006), 279, Wielkopolska (western-central Poland) was repopulated only after 700, and Pomerania shortly before 800. As Brather (2001), 59 points out, the earliest settlements to the west of the river Oder (eastern Germany) cannot be dated before the year 700.

15 Levak (2005); Ančić (2018), 57.

least, “intensification” (a term often employed by anthropologists in reference to critical changes in the economic profile) does not refer to the introduction of “better,” more productive techniques, but simply to more of the same swidden cultivation that had been practiced in the region since prehistory. Neither slash-and-burning, nor itinerant agriculture can explain the appearance of agricultural communities on the northern and northwestern rim of the Avar territories in the Carpathian Basin. It remains unclear how land was cultivated around the late 6th- and early 7th-century settlements excavated in Bohemia and Moravia, but the general impression is one of “service settlements” (perhaps organized by the Avar elites), not of independent, self-sufficient villages.<sup>16</sup> The southern part of the Roztoky settlement, for example, may have been an ironworking center, the inhabitants of which were fed with grain brought from the outside. Inside the Carpathian Basin, the evidence of service settlements consists so far of communities of attached specialists, such as weavers and potters, working for the local elites. The mirror image of this phenomenon in the Lower Danube region is the smelting site with separate facilities, such as found in Şirna, Bucharest-Lunca Bârzeşti and Budureasca 5. Smelters lived in separate settlements because they worked in family groups, but their relations with agriculturist neighbors will have to be clarified by future studies. In the absence of any signs of social differentiation in burial assemblages, the status of smelters in the forest belt (Sniadzin) is equally unclear. Elsewhere, however, the specialization implied by the presence of ironworking sites is definitely linked to social differentiation and the power of local elites. Besides smelting facilities being located in close proximity to strongholds, standard “units” of iron in the form of axe-shaped bars were produced in the Middle Volga region, and they may have served for tribute payment. Tribute in grain, on the other hand, is documented archaeologically by numerous silos, such as found in Maklasheevka 2. The Middle Volga region, on the other hand, is one of the most productive areas in the chernozem belt of Eurasia, and to this day one of the largest granaries of Russia. There can be no accident that smelting as an attached specialization appears in those areas (the Middle Volga and the Lower Danube regions) that produced evidence of crop cultivation and abundance of produce.<sup>17</sup>

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16 For service settlements inside the Carpathian Basin, see Szentpéteri (2009).

17 Smelting sites appear in the Carpathian Basin and in the steppe region shortly before and after 700, at the same time as the intensification of agricultural production documented archaeologically by many more finds of agricultural tools (some of them deposited in graves), increased evidence of cereal cultivation in paleobotanical samples, and larger bone assemblages with the predominant role of domestic species.

In the Carpathian Basin, the Lower Danube and the Middle Volga regions, the metallographic analyses of iron and steel artifacts indicate that local blacksmiths controlled a number of elaborate techniques, which they skillfully applied to specific needs. Judging by such evidence, blacksmiths must have been attached specialists, much like the smelters, even though no smithy has so far been found that could be compared to smelting sites. By contrast, the evidence of relatively simple casting techniques in the form of ladles and moulds discovered on several sites in Eastern Europe is almost always associated with household activities, strongly suggesting a “do-it-yourself” production environment with no attached specialists. Nonetheless, the privileged position of craftsmen in societies of the Carpathian Basin and central Russia results from the deposition of tools in graves of men, some of which were also buried with weapons. In other words, crafting in those societies was regarded as a badge of social distinction, and “embedded production” as an exclusive privilege of the elite.<sup>18</sup>

Were those “peasant-mode societies,” such as Chris Wickham has postulated for contemporary (western) Europe?<sup>19</sup> To be sure, there is no reason to doubt that in the Lower Danube region, for example, individual households were the basic production units. Markers of private or family property, such as found in Rákoczfalva and Kölked, suggest that the same is true for the Carpathian Basin. Similarly, the intrasite analysis of several settlement sites in the Lower Danube region shows that “surplus” was indeed given away and/or collectively consumed in communal celebrations. While “pooling” as a strategy for social and political differentiation in communities of 6th- and 7th-century settlements excavated in Romania, potlatch-like disposal of valuables (in the form of hoards of bronze and silver) in the western parts of the forest-steppe belt is the material culture correlate of desperate attempts to compensate for the weakening position of local elites. In that respect, it is true that judging from the archaeological evidence, ranking in some parts of Eastern Europe was not structurally permanent, at least not in the western parts of the forest-steppe belt. Elsewhere in the 6th and early 7th century, elites already gave out less goods, and instead expected to receive more, supposedly in exchange for “less

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18 The versatility implied by the variety of tools deposited in graves (tools of jewelers, but also smiths and carpenters) may point to the same conclusion. In an environment of “embedded production,” the craftsman appears as a “jack-of-all-trades,” for the emphasis is on his skills and thorough command of advanced techniques, and not on the relative demand of his products.

19 Wickham (2006), 536–41. As Ensor (2017), 236 put it, what anthropologists call “peasantries” are basically Marx’s “Germanic mode of production,” typified by “nuclear or extended families that own small agricultural landholdings as means of subsistence.”

tangible forms of service," such as military protection.<sup>20</sup> "Third-type transfers" such as the tribute taken by Avars from Sclavenes and Wends, or the probably regular tribute payments implied by such archaeological evidence as the silos in the Maklasheevka 2 stronghold suggest that ranking was replaced by class differences, whether or not those societies may be called "feudal."<sup>21</sup>

However, if one expects from peasant-mode societies a "relative lack of economic differentiation, and also a relative lack of artisanal scale and complexity," then the evidence from Eastern Europe is going to be a great disappointment.<sup>22</sup> There is actually no "simplicity of the system." On the contrary, productive specialization is abundantly documented archaeologically in the Carpathian Basin, the Lower Danube region, the eastern parts of the forest-steppe belt, as well as in the taiga. Attached crafting in the form of smelting appears even in those parts of the forest belt now in Belarus, in which the archaeological evidence of elites is conspicuously absent. Conversely, in the Baltic region, where agrarian technologies were in use that have been dubbed "simple," there is abundant evidence of a well entrenched aristocracy with martial postures most obvious in burial assemblages. Judging by the considerable impact that the swidden cultivation had on the environment in the Baltic region, those do not seem to have been societies in which "peasants do not work so hard."<sup>23</sup> Nor can one envision a society in which peasants exchanged goods, with reciprocity "embedded in the network of social relationships."<sup>24</sup> Nothing is known about exchanges between peasants in Eastern Europe, and the only evidence of gift giving is wealth finance, which is essentially exchange between elites, not peasants. As a "heuristic device intended to suggest what questions should be asked of the evidence about a particular set of social and economic relationships," the peasant mode of production is therefore an utterly inadequate tool for explaining the transition from Antiquity to the Middle Ages in Eastern Europe.<sup>25</sup> Two of its characteristic features (that peasants exchange goods and that they do not work very hard) are simply unwarranted assumptions, ultimately derived from Chaianov's work and the uncritical adoption of the evolutionary schemes of "classical" anthropology. As far as I know, they are not supported by any shred of evidence from any part of Europe. Is then the tributary mode of production, so dear to Romanian sociologists and archaeologists,

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20 Wickham (2006), 540.

21 The Early Avar and early Slavic societies have rarely, if ever been discussed in terms of the "feudal mode of production." However, see László (1955), 179; Brachmann (1986).

22 Wickham (2006), 539.

23 Wickham (2006), 537.

24 Wickham (2006), 537.

25 Haldon (1993), 54.

a better explanatory model? That mode of production was characterized by social evolution only to the extent that it reflected the actions of an elite able to dominate a passive subaltern class living in village communities. The elite was not only “foreign” (i.e., of an ethnic identity different from that of the village community members), but also nomadic.<sup>26</sup> However, there is no evidence of nomadism either in the steppe lands north of the Black Sea, nor in the Carpathian Basin. Those were ranked societies, with the assemblage in Malo Pereshchepyne most certainly associated with a “king” (qagan), whose power was ascribed, not achieved, and may well have involved the control of wealth. Nonetheless, there is no indication that the qagan in Malo Pereshchepyne, or, for that matter, anybody else in the steppe lands north of the Black Sea, could extract tribute from the regions that are now in southern and eastern Romania.<sup>27</sup> Attempts to make societies in Eastern Europe fit in the Procrustean bed of the tributary mode of production are therefore little more than the arbitrary application of a series of “types” of productive organization to any social formation that exhibits signs of that particular organization, in short the “fetishizing of organizational forms.”<sup>28</sup>

Judging from the evidence presented in this book, the early Middle Ages in Eastern Europe was definitely not “a period of relative aristocratic weakness.”<sup>29</sup> From the Carpathian Basin to the Ural Mountains, and from the Baltic shore to the Danube frontier of the Empire, mortuary archaeology has produced abundant evidence of social stratification reflected in burial assemblages. Male status was vicariously communicated through rich female burials, both in the western parts of the Carpathian Basin during the Early Avar age, and in central Russia. Mostly everywhere, burial customs changed as a result of a dramatic shift in the social life from family or clan affiliation to individual value, self-made political leaders, and military skills.<sup>30</sup> Such changes are evident even in the Far East of Eastern Europe, in the taiga region inhabited by hunters and

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26 Stahl (1958–1965), vol. 1, 19–20; Comşa (1967), 441. As Guga (2015), 306 points out, Stahl noted that “tributary” referred to the mode of exploitation, not to production properly speaking. As a consequence, he insisted upon the idea that the elite extracting the tribute from local village communities was nomadic, because he could thus explain why that elite had no interest to intervene in the organization of production.

27 Similarly, while the qagan of the Avars asked the Slavens in what is now southern Romania to pay him tribute, nothing is known about them obeying his orders.

28 Haldon (1993), 53.

29 Wickham (2006), 827.

30 The only area in which such changes are not visible is the northwestern part of the forest belt, where long barrows have been interpreted as family burials and strongholds as communal centers. There is no evidence of social differentiation in that region, and elites, if they existed at all, are archaeologically invisible.

gatherers, as indicated by burial assemblages in Vesliana and by hoards of silver such as found in Bartym. No peasants lived in that region, and no agriculture was practiced on any significant scale. What moved up a number of prominent families was the trade with furs. That trade was in fact organized by aristocrats, both local and Soghdian, and the presence of coins (which nonetheless, like the copper coins in the Lower Danube region, played no economic role in the local society) is a sure indication of trade, not wealth finance. In the Baltic region, the new aristocracies had a military identity, and the same is true for the Carpathian Basin both before and after the Avar conquest.

The study of Eastern Europe in the early Middle Ages represents a challenge for historians. The region cannot be easily written out of European history, but no model created for that history can account for the bewildering diversity of Eastern Europe. This is not just early Byzantine history written large to include the lands across the northern border of the Empire. Nor can the East be simply added to the standard narrative of European early medieval history, as such an approach will raise more questions than it will answer. Eastern Europe cannot be regarded as the periphery of the “West” or of Byzantium, either in the 6th and 7th centuries, or later. Discontinuity is a key phenomenon for understanding the early medieval developments in the central and northern parts of the Balkan Peninsula, as well as in Poland. However, there is also incontrovertible evidence of continuity of urban settlements on the southern rim of the region (the northern coast of the Black Sea, as well as the coastal area of the Balkan Peninsula). The rich burials in the Ufa region of present-day Bashkortostan, the burial mounds in eastern Lithuania, as well as the formidably furnished graves of warriors in Sambia, Left-Bank Ukraine, and Avar-age Hungary are a clear testimony that in Eastern Europe, much like in the rest of the continent during the 6th and the 7th century, considerable social differences were maintained in ranked societies. At the same time, the states in existence by the end of the transition period considered in this book—the Avar qaganate in Central Europe, early medieval Bulgaria, and Khazaria in the steppe lands north of the Black and Caspian seas—are fundamentally different from anything that existed in the rest of Europe at that same moment in time. If the history of Eastern Europe is to be integrated into European history, then its study requires a drastic reconfiguration of the current understanding of the transition from Late Antiquity to the Middle Ages.



# Bibliography

## Sources

### Agathias, *Histories*

Edition: *Agathiae Myrinaei Historiarum libri quinque*, ed. R. Keydell, Corpus Fontium Historiae Byzantinae, Series Berolinensis 2 (Berlin, 1967).

Transl.: *Agathias, The Histories*, transl. J.D. Frendo, Corpus Fontium Historiae Byzantinae, Series Berolinensis 2A (Berlin, 1975).

### Cassiodorus, *Variae*

Edition: *Varie, Volume V, Libri XI–XII*, ed. A. Giardina, G.A. Cecconi, and I. Tantillo (Rome, 2015).

Transl.: *The Letters of Cassiodorus, Being a Condensed Translation of the Variae Epistolae of Magnus Aurelius Cassiodorus Senator*, transl. Th. Hodgkin (London, 1886).

### *Codex Iustinianus*

Edition: *Corpus Iuris Civilis 2. Codex Iustinianus*, ed. P. Krüger (Berlin, 1892).

### *Codex Suprasliensis*

Edition: *Suprasl'skaia rukopis*, ed. S.N. Severianov, vol. 2 (St. Petersburg, 1904).

### Comes Marcellinus, *Chronicle*

Edition: “Marcellini V.C. comitis Chronicon,” ed. Th. Mommsen, *Chronica Minora Saec. IV, V, VI, VII*, vol. 2, MGH AA 11 (Berlin, 1894), 37–108.

### Constantine Porphyrogenitus

Bilingual: *De administrando imperio*, ed. Gy. Moravcsik and transl. R.J. H. Jenkins, Corpus Fontium Historiae Byzantinae, 1 (Washington, 1967).

### Fredegar, *Chronicle*

Edition: “Chronicarum Fredegari libri IV cum continuationibus,” ed. B. Krusch, *Fredegarii et aliorum chronica. Vitae sanctorum*, MGH SRM 2 (Hannover, 1888), 18–193.

### John Lydus

Edition: Ioannes Lydus, *On Powers*, or The Magistracies of the State, ed and transl. A.C. Bandy, Memoirs of the American Philosophical Society 149 (Philadelphia, 1982).

### John Malalas

Edition: *Ioannis Malalae Chronographia*, ed. H. Thurn, Corpus Fontium Historiae Byzantinae, Series Berolinensis 35 (Berlin/New York, 2000).

Transl.: *The Chronicle of John Malalas*, transl. E. Jeffreys, M. Jeffreys, and R. Scott Byzantina Australiensia 4 (Leiden/Boston, 2017).



## John of Ephesus

Bilingual: *Iohannis Ephesini Historiae ecclesiastica pars tertia*, ed and transl. E.W. Brooks (Paris, 1935–1936).

Jordanes, *Getica*

Edition: “De origine actibusque Getarum,” ed. Th. Mommsen, *Iordanis Romana et Getica*, MGH AA 5.1 (Berlin, 1882).

Transl.: *The Gothic History of Jordanes in English Version*, transl. C.C. Mierow (Princeton, 1915).

## Menander the Guardsman

Bilingual: *The History of Menander the Guardsman*, ed. and transl. R.C. Blockley, ARCA Classical and Medieval Texts, Papers and Monographs 17 (Liverpool, 1985).

*Menologion*

Edition: *Menologii nonymi Byzantini saeculi X quae supersunt. Fasciculos 2 sump-tibus Caesareae Academiae Scientiarum e codice Mosquensi 376 Vlad.*, ed. V.V. Latyshev (Petrograd, 1911–1912).

*Miracles of St. Demetrius*

Bilingual: *Les plus anciens recueils des miracles de Saint Démétrius et la pénétration des Slaves dans les Balkans*, ed. and transl. P. Lemerle (Paris, 1979).

*Narrationes*

Bilingual: “Narrationes de exilio sancti papae Martini,” ed. and transl. B. Neil, *Seventh-Century Popes and Martyrs. The Political Hagiography of Anastasius Bibliothecarius*, *Studia Antiqua Australiensia* 2 (Turnhout, 2006), 166–233.

*Novellae*

Edition: *Corpus Iuris Civilis* 3. *Novellae*, ed. R. Schöll and G. Kroll (Berlin, 1895).

## Paul the Deacon

Edition: “Pauli Historia Langobardorum,” ed. G. Waitz, *Scriptores rerum Langobardicorum et Italicarum saec. VI–IX*, MGH SS rer. Lang. 1 (Hannover, 1878), 45–187.

Procopius of Caesarea, *Buildings*

Bilingual: *Procopius in Seven Volumes*, ed. J. Haury and transl. H.B. Dewing, vol. 7, Loeb Classical Library 343 (Cambridge, Mass., 1940).

Procopius of Caesarea, *Wars*

Bilingual: *Procopius in Seven Volumes*, ed. J. Haury and transl. H.B. Dewing, vol. 1–5, Loeb Classical Library 48, 81, 107, 173, and 217 (Cambridge, Mass., 1914–1928).

Transl.: *The Wars of Justinian*, transl. H.B. Dewing and A. Kaldellis (Indianapolis/Cambridge, 2014).

## Pseudo-Zacharias Rhetor

Bilingual: *The Chronicle of Pseudo-Zachariah Rhetor. Church and War in Late Antiquity*, ed. and transl. G. Greatrex (Liverpool, 2011).

## Russian Primary Chronicle

Transl.: *The Russian Primary Chronicle. Laurentian Text*, transl. S.H. Cross and O.P. Sherbowitz-Wetzor, Mediaeval Academy of America Publications 60 (Cambridge, Mass., 1953).

*Strategikon*

Bilingual: *Das Strategikon des Maurikios*, ed. G.T. Dennis and E. Gamillscheg, Corpus Fontium Historiae Byzantinae, Series Vindobonensis 17 (Vienna, 1981).

Transl.: *Maurice's Strategikon. Handbook of Byzantine Military Strategy*, transl. G.T. Dennis (Philadelphia, 1984).

## Theophanes Confessor

Edition: *Theophanis Chronographia*, ed. Carl de Boor, 2 vols. (Leipzig, 1883 and 1885).

Transl.: *The Chronicle of Theophanes Confessor. Byzantine and Near Eastern History, AD 284–813*, transl. C. Mango and R. Scott (Oxford/New York, 1997).

## Theophylact Simocatta

Edition: *Theophylacti Simocattae Historiae*, ed. C. de Boor and P. Wirth (Stuttgart, 1972).

Transl.: *The History of Theophylact Simocatta*, transl. M. and M. Whitby (Oxford, 1986).

## Secondary Literature

Abadie-Reynal, Catherine, "Céramique et commerce dans le bassin égéen du IV-e au VII-e siècle," in *Hommes et richesses dans l'Empire byzantin*, ed. G. Dagron, vol. 1, Réalités byzantines 1 (Paris, 1989a), 143–62.

Abadie-Reynal, Catherine, "Les amphores protobyzantines d'Argos (IV-e–VI-e siècles)," in *Recherches sur la céramique byzantine*, eds. V. Déroche and J.-M. Spieser, Bulletin de Correspondance Hellénique, Supplement 18 (Athens/Paris, 1989b), pp. 47–56.

Abashina, Nataliia S., "Rann'oslov'ianske poselennia Obukhiv VII na Stugni," *Arkheolohiia* 53 (1986), 72–86.

Abashina, Nataliia S., "Rannoslav'ians'ki zhytla poselennia Obukhiv II," in *Arkheologiia davnikh slov'ian. Doslidzhennia i materialy*, ed. D.N. Kozak (Kiev, 2004), 277–300.

Agallopoulou, Penelopi, "Ladochori Hegoumenitsas," *AD* 30, no. 2 (1975), 239.

Agbe-Davies, Anna S., and Alexander A. Bauer, "Rethinking trade as a social activity: an introduction," in *Social Archaeologies of Trade and Exchange. Exploring Relationships Among People, Places and Things*, eds. A.A. Bauer and A.S. Agbe-Davies (Walnut Creek, 2010), 13–28.

- Agolli, Esmeralda, "The distribution of arrowheads in Koman culture burials (6th–8th centuries A.D.)," in *New Directions in Albanian Archaeology. Studies Presented to Muzafer Korkuti*, eds. L. Bejko and R. Hodges, International Centre for Albanian Archaeology Monograph Series 1 (Tirana, 2006), 287–93.
- Aibabin, Aleksandr I., "O proizvodstve poiasnykh naborov v rannesrednevekovom Khersone," *SA*, no. 3 (1982a), 190–98.
- Aibabin, Aleksandr I., "Pogrebeniia konca VII-pervoi poloviny VIII v. v Krymu," in *Drevnosti epokhi velikogo pereseleniia narodov V–VIII vekov. Sovetsko-vengerskii sbornik*, eds. A.K. Ambroz and I. Erdélyi (Moscow, 1982b), 165–92.
- Aibabin, Aleksandr I., "Pogrebenie khazarskogo voina," *SA*, no. 3 (1985), 191–205.
- Aibabin, Aleksandr I., "Kelegeiskoe pogrebenie voennogo vozhdia," *PPIK* 2 (1991), 28–35.
- Aibabin, Aleksandr I., "La Crimée de l'Antiquité tardive et du haut Moyen Age (milieu du III<sup>e</sup>–IX<sup>e</sup> s.)," in *Archéologie de la Mer Noire. La Crimée à l'époque des Grandes Invasions, IV<sup>e</sup>–VIII<sup>e</sup> siècles. Conseil Régional de Basse Normandie, 30 mai–1er septembre 1997*, eds. A.I. Aibabin, M. Kazanski, I.N. Khrapunov and S.V. Pavlichenko (Caen, 1997), 41–57.
- Aibabin, Aleksandr I., "On Byzantium's northern border: the rural population of the mountainous Crimea in the 6th to 9th centuries," in *Les villages dans l'Empire byzantin, IV<sup>e</sup>–XV<sup>e</sup> siècles*, eds. J. Lefort, C. Morrisson and J.-P. Sodini, *Réalités byzantines* 11 (Paris, 2005), 415–24.
- Aibabin, Aleksandr I., "Das frühbyzantinische Chersonesus/Cherson," in (eds.), *Byzanz—das Römerreich im Mittelalter. Teil 2, 1. Schauplätzen*, eds. F. Daim and J. Drauschke, *Monographien des Römisch-Germanischen Zentralmuseums* 84 (Mainz, 2010), 395–424.
- Aibabin, Aleksandr I., "Die Nekropole von Lučistoe," in *Die Krim. Goldene Insel im Schwarzen Meer. Griechen—Skythen—Goten*, eds. S. Müller and M. Schmauder (Bonn, 2013), 378–87.
- Aibabin, Aleksandr I., "Written sources on Byzantine ports in the Crimea from the fourth to [the] seventh century," in *Medieval Ports in North Aegean and the Black Sea. Links to the Maritime Routes of the East. International Symposium, Thessalonike, 4–6 December 2013. Proceedings*, ed. Ph. Karagianni (Thessaloniki, 2013), 57–67.
- Aibabin, Aleksandr I., "Arkhontii, klimaty i kreposti v Iugo-Zapadnom Krymu v VII veke," in *Kul'turnyi shar. Statti na poshanu Gliba Iuryiovycha Ivakin*, ed. O.P. Tolochko (Kiev, 2017), 13–23.
- Aibabin, Aleksandr I., "Rannevizantiiskii Bospor," in *Vizantiia v kontekste mirovoi kul'tury. Materialy konferencii, posviashchennoi pamiati Alisy Vladimirovny Bank, 1906–1984*, ed. V.N. Zaleskaia et al., *Trudy Gosudarstvennogo Ermitazha* 89 (St. Petersburg, 2017), 140–50.

- Aibabin, Aleksandr I., "Usad'ba rybaka v ranneviziantskom Bospore," in *Problemy istorii i arkhologii srednevekovogo Kryma. Materialy mezhdunarodnoi nauchnoi konferencii posviashchennoi 70-letiiu Aleksandra Il'icha Aibabina. Simferopol', 10–11 ianvaria 2019 g.*, ed. E.A. Khairedinova (Simferopol', 2019), 7–17.
- Aibabin, Aleksandr I. and V. Iu. Iurochkin, "Mogil'nik 'Baklinskii ovrag' (po materialam raskopok 1992–1993 g.)," in *Problemy arkhologii drevnego i srednevekovogo Kryma. Sbornik nauchnykh trudov*, eds. I.M. Mogarichev and I.N. Khrapunov (Simferopol', 1995), pp. 125–35 and 206–35.
- Aibabin, Aleksandr I. and Elzara A. Khairedinova, "Un nouvel ensemble de fibules digitées provenant de la nécropole de Loutchistoe," in *Les sites archéologiques en Crimée et au Caucase durant l'Antiquité tardive et le Haut Moyen Age*, eds. M. Kazanski and V. Soupault, *Colloquia Pontica* 5 (Leiden/Boston, 2000), 65–87.
- Aibabin, Aleksandr I. and Elzara A. Khairedinova, *Das Gräberfeld beim Dorf Lučistoe 1. Ausgrabungen der Jahre 1977, 1982–1984*, Monographien des Römisch-Germanischen Zentralmuseums 83.1 (Mainz, 2009).
- Aibabin, Aleksandr I. and Elzara A. Khairedinova, *Mogil'nik u sela Luchistoe. Raskopki 1984, 1986, 1991, 1993–1995 godov*, Bosporskie issledovaniia. Supplementum 4.14 (Simferopol'/Kerch', 2014).
- Aibabin, Aleksandr I. and Irina P. Zaseckaia, "Krym v VI–VII vekakh (pod vlast'iu Vizantiiskoi imperii)," in *Krym, severo-vostochnoe Prichernomor'e i Zakavkaz'e v epokhu srednevekov'ia, IV–XIII veka*, eds. T.I. Makarova and S.A. Pletneva (Moscow: Nauka, 2003), 27–52 and 87–113.
- Ailincăi, Sorin-Cristian, Mihai Constantinescu, Florin Curta, and Andrei Dorian Soficaru, "An early seventh-century female grave from Dobruja," *AB* 18, no. 1 (2014), 65–84.
- Akbulatov, I.M., Gennadii N. Garustovich, and M.F. Obydenov, "Raboty v Bashkirii," in *Arkheologicheskie otkrytiia 1983 goda*, eds. R.M. Munchaev (Moscow, 1985), pp. 134–35.
- Akhmedov, Iliia R., "Issledovaniia kompleksa arkhologicheskikh pamiatnikov u sela Nikitino," in *Arkheologicheskii otkrytiia 2002 goda*, ed. V.V. Sedov (Moscow, 2003), 85–87.
- Akhmedov, Iliia R., "Problema 'final'nogo' perioda kul'tury riazano-oksikh finnov (k sovremennomu sostoiianiiu voprosa)," in *Arkheologiiia Vostochnoi Evropy v I tysiacheletii n. e. Problemy i materialy*, eds. I.V. Islanova and V.E. Rodinkova, *Rannelslavianskii mir* 13 (Moscow, 2010), 7–34.
- Akhmedov, Iliia R., "Lik slavy'. Sogdiiskie nakhodki iz Elshinskogo klada," in *Slaviane i inye iazyci ... K iubileiu Natal'i Germanovny Nedoshivinoi*, ed. N.I. Astashova, *Trudy Gosudarstvennogo istoricheskogo muzeia* 198 (Moscow, 2014a), 282–88.

- Akhmedov, Iliia R., "Nekotorye indikatory kul'turnykh vzaimodeistvii v drevnostiakh riazano-okskikh finnov vtoroi poloviny V-nachala VI v.," in *Problemy vzaimodeistviia naseleniia Vostochnoi Evropy v epokhu Velikogo pereseleniia narodov*, ed. A.M. Oblomskii (Moscow, 2014b), 138–77.
- Akhmedov, Iliia R., "Pleti iz riazano-okskikh mogil'nikov. Novye dannye," in *Arkheologiia bez granic. Kollekcii, problemy, issledovaniia, gipotezy*, ed. A.A. Zolotova, Trudy Gosudarstvennogo Ermitazha 77 (St. Petersburg, 2015), 30–65.
- Akhmedov, Iliia R., "Rannevizantiiskie nakhodki na r. Oke v central'noi Rossii (predvaritel'nye soobshchenie)," in *Od Bachórza do Światowida ze Zbrucza. Tworzenie się słowiańskiej Europy w ujęciu źródłoznawczym. Księga jubileuszowa Profesora Michała Parczewskiego*, B. Chudzińska, M. Wojenka and M. Wołoszyn (Cracow/Rzeszów, 2016a), 171–77.
- Akhmedov, Iliia R., "Vizantiiskie i slavianskie nakhodki v riazano-okskikh drevnostiakh," in *Drevnosti Pooch'ia. Sbornik nauchnykh rabot k 60-letiiu V.V. Sudakova*, ed. A.O. Nikitin (Riazan', 2016b), 64–87.
- Akhmedov, Iliia R., "Shlemy iz mogil'nika riazano-okskikh finnov u s. Caricyno (predvaritel'nye soobshchenie)," in *Evropa ot Latena do Srednevekov'ia. Varvarkii mir i rozhdenie slavianskikh kul'tur. K 60-letiiu A.M. Oblomskogo*, eds. V.E. Rodinkova and O.S. Rumianceva, Ranneslavianskii mir 19 (Moscow, 2017), 235–48.
- Akhmedov, Iliia R. and I.V. Belocerkovskaia, "Veshchevye komplekсы mogil'nika Zarech'e-4," in *Arkheologicheskie pamiatniki Okskogo basseina*, eds. I.V. Belocerkovskaia and V.P. Cheliapov (Riazan', 1996), 104–41.
- Akhmedov, Iliia R. and A.P. Gavrilov, "Nakhodki matric dlia izgotovleniia detalei geral'dicheskikh poiasov v drevnostiakh riazano-okskikh finnov," *Stratum+*, no. 5 (2017), 17–40.
- Akhmedov, Iliia R., I.V. Belocerkovskaia and O.S. Rumianceva, "Kul'tura riazano-okskikh mogil'nikov. Vvodnye zamechaniia," in *Vostochnaia Evropa v seredine I tys. n. e.*, eds. I.O. Gavritukhin and A.M. Oblomskii, Ranneslavianskii mir 9 (Moscow, 2007), 133–275.
- Akhmedov, Iliia R., A.G. Furas'ev, Mark B. Shchukin and I.V. Belocerkovskaia, "The forest zone of Eastern Europe in the Migration Period and the early Middle Ages," in *Merowingerzeit: Europa ohne Grenzen. Archäologie und Geschichte des 5. bis 8. Jahrhunderts*, ed. W. Menghin (Berlin/Wolfratshausen, 2007), 112–36.
- Akhmedov, Iliia R., E. Iu. Novikova, A.M. Krasnikova, I.V. Belocerkovskaia, and S.A. Avdusina, "The peoples of central Russia," in *Merowingerzeit: Europa ohne Grenzen. Archäologie und Geschichte des 5. bis 8. Jahrhunderts*, ed. W. Menghin (Berlin/Wolfratshausen, 2007), 313–66.
- Akhmerov, R.B., "Ufimskie pogrebeniia VI–VIII vekov nashei ery," *KSDPI* 40 (1951), 125–37.

- Akrivopoulou, Sophia, "He anaskaphe sten odo Basileos Herakleiou 45 ste Thessalonike," in *AEMT* 24 (2010), 255–62.
- Aksenov, Viktor S., "Kompleksy pred saltovskogo i rann saltovskogo vremeni s territorii Kharkovskoi obl.," *SLP* (2012), 32–50.
- Aksenov, Viktor S. and L.I. Babenko, "Pogrebenie VI–VII vekov n.e. u sela Mokhnach," *RA*, no. 3 (1998), 111–21.
- Aladzhev, Andrei, "The final stage in the development of the early Byzantine towns on the Lower Danube," in *Der Donaulimes in der Spätantike und im Frühmittelalter*, eds. A. Schwarcz, P. Soustal, and A. Cholakova, *Miscellanea Bulgarica* 22 (Vienna, 2016), 259–78.
- Aladzhev, Dimcho, "Rezultati ot arheologicheskite razkopki na Konstanciaia," in "Marica-iztok." *Arheologicheski prouchvaniia*, eds. I. Panaiotov et al., vol. 3 (Radnevo, 1995), 181–226.
- Alapy, Gyula, "Lovasnomád sírok a Vágduna alsócsallóközi jobbpártján," *Nemzeti Kultúra* 1 (1933), 36–43.
- Albrecht, Stefan, *Quellen zur Geschichte der byzantinischen Krim*, Monographien des Römisch-Germanischen Zentralmuseums 101 (Mainz, 2012).
- Albrecht, Stefan, "Cherson als Zentralort auf der südwestlichen Krim (6.–10. Jahrhundert)," in *Grenzübergänge. Spätromisch, frühchristlich, frühbyzantinisch als Kategorien der historisch-archäologischen Forschung an der mittleren Donau. Akten des 27. internationalen Symposiums der Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donauraum*, Ruma, 4.–7.11.2015, eds. I. Bugarski, O. Heinrich-Tamáška, V. Ivanišević and D. Syrbe, *Forschungen zu Spätantike und Mittelalter* 4 (Remshalden, 2016), 355–84.
- Alekseenko, Nikolai A., "Klad rannevizantiiskikh monet iz okrestnostei Sevastopolia," *KS* 12 (2003a), 339–54.
- Alekseenko, Nikolai A., "Les relations entre Cherson et l'empire, d'après le témoignage des sceaux des archives de Cherson," *SBS* 13 (2003b), 75–83.
- Alekseenko, Nikolai A., "Chinovniki Balkano-maloaziiskogo regiona na molivdovulakh Khersonskogo arkhiva," in *Numizmatichni i sfragistichni primosi kám istoriata na zapadnoto Chernomorie. Mezhdunarodna konferenciia, Varna, 12–15 septemvri 2001 g.*, eds. V. Iotov and I. Lazarenko, *Acta Musei Varnensis* 2 (Varna, 2004), 265–75.
- Alekseenko, Nikolai A., "Denezhnoe obrashchenie okrugii vizantiiskogo Khersona v VII v.," *MAIET* 11 (2005), 437–51.
- Alekseenko, Nikolai A. "Torgovyi i voennyi port vizantiiskogo Khersona po dannym pechatei predstavitelei morskogo vedomstva imperii," *SS* 3 (2008), 8–15.
- Alfen, Peter G. van, "New light on the 7th-c. Yassi Ada shipwreck: capacities and standard sizes of LRA1 amphoras," *Journal of Roman Archaeology* 9 (1996), 189–213.

- Alikhova, A.E., "Serpovskii mogil'nik," in *Iz drevnei i srednevekovoi istorii mordovskogo naroda*, ed. A.E. Alikhova, M.F. Zhiganov, and P.D. Stepanov (Saransk, 1959), 117–37.
- Allmaë, Raili and Liina Maldre, "Rösna-Saare I kääbaskalmistu—esialgseid osteoloogilisi andmeid," *SK* 3 (2005), 121–37.
- Allmaë, Raili, Mare Aun, and Liina Maldre, "Predvaritel'nye rezul'taty izucheniia osteologicheskogo materialy kurgannykh mogil'nikov Rysna-Saare I i II v Severnoi Setumaa (Iugo-vostochnaia Estoniia)," *AIPPZ* (2007), 298–310.
- Allmaë, Raili, Mare Aun, and Liina Maldre, "Rösna-Saarõ I kääbaskalmistu," in *Setomaa, 2. Vanem ajalugu muinasajast kuni 120. aastani*, eds. H. Valk, A. Selart, and A. Lillak (Tartu, 2009), 88–94.
- Alt, Kurt W., Christiane Müller, and Petra Held, "Ernährungsrekonstruktion anhand stabiler Isotope von Kohlenstoff und Stickstoff an frühmittelalterlichen Bestattungen der Gräberfelder von Tauberbischofsheim-Dittigheim und Szólád," in *Lebenswelten zwischen Archäologie und Geschichte. Festschrift für Falko Daim zu seinem 65. Geburtstag*, eds. J. Drauschke et al., Monographien der Römisch-Germanischen Zentralmuseums, 150.1 (Mainz, 2018), 869–86.
- Alt, Kurt W., Corina Knipper, Daniel Peters, Wolfgang Müller, Anne-France Maurer, Isabelle C. Kollig, Nicole Nicklisch, Christiane Müller, Sarah Karimnia, Guido Brandt, Christina Roth, Martin Rosner, Balázs Gusztáv Mende, Bernd R. Schöne, Tivadar Vida and Uta von Freeden, "Lombards on the move—an integrative study of the migration period cemetery at Szólád, Hungary," *PLoS One* 9, no. 11 (2014), 1–15.
- Ambroz, Anatolii K., "Dunaiskie elementy v rannesrednevekovoi kul'ture Kryma (VI–VII vv.)," *KSIA* 113 (1968), 10–23.
- Ambroz, Anatolii K., "Iuzhnye khudozhestvennye sviazi naselenie verkhnoo Podneprov'ia v VI v.," in *Drevnie slaviane i ikh sosedi*, eds. I.V. Kukhareno and P.N. Tret'iakov (Moscow, 1970), 70–74.
- Ambroz, Anatolii K., "Vostochnoevropeskie i sredneaziatskie stepi V-pervoi poloviny VIII v.," in *Stepi Evrazii v epokhu srednevekov'ia*, ed. S.A. Pletneva (Moscow, 1981), 10–23.
- Ames, Kenneth M., "Chiefly power and household production on the Northwest Coast," in *Foundations of Social Inequality*, eds. T.D. Price and G.M. Feinman (New York, 1995), 155–87.
- Amorim, Carlos Eduardo G., Stefania Vai, Cosimo Posth, Alessandro Modi, István Koncz, Susanne E. Hakenbeck, Cristina La Rocca, Balázs Gusztáv Mende, Dean Bobo, Walter Pohl, Luisella Pejrani Baricco, Elena Bedini, Paolo Francalacci, Caterina Giostra, Tivadar Vida, Daniel Winger, Uta von Freeden, Silvia Ghirotto, Martina Lari, Guido Barbujani, Johannes Krause, David Caramelli, Patrick J. Geary and Krisina R. Veeramah, "Understanding 6th-century barbarian social organization and migration through paleogenomics," *Nature Communications* 9, no. 1 (2018), 1–11.

- Anagnostakis, Ilias, "Paraktioi oikismoi tes protobyzantines Messenias. He siopeton pegon kai he apospasmatiche martyria tes archaiologias," in *Protobyzantine Messene kai Olympia. Aktikos kai agrotikos choros ste Dylike Peloponneso. Praktika tou Diethnous symposiou, Athena, 29-30 maiou 1998*, ed. P.G. Themelis and V. Konti (Athens, 2002), 137-60.
- Anamali, Skënder, "Një varrezë e mesjetës së hershme në Bukël të Mirditës," *Iliria* 1 (1971), 209-25.
- Anamali, Skënder, "Oreficerie, gioielli bizantini in Albania: Komani," *CCARB* 40 (1993), 435-46.
- Anamali, Skënder and Hëna Spahiu, "Varrëza e herëshme mesjetare e Krujës," *Buletin i Universitetit shtetëror të Tiranës* 17, no. 2 (1963), 3-85.
- Anamali, Skënder and Hëna Spahiu, "Varrëza arbërore e Krujes," *Iliria* 9-10 (1979-1980), 47-103.
- Ančić, Mladen, "Ranosrednjovjekovni Neretvani ili Humljani. Tragom zabune koju je prouzročilo djelo *De administrando imperio*," in *Hum i Hercegovina kroz povijest*, ed. I. Lučić (Zagreb, 2011), 218-78.
- Ančić, Mladen, "Migration or transformation: the roots of the early medieval Croatian polity," in *Migration, Integration, and Connectivity on the Southeastern Frontier of the Carolingian Empire*, eds. D. Dzino, A. Milošević and T. Vedriš, East Central and Eastern Europe in the Middle Ages, 450-1450 50 (Leiden/Boston, 2018), 43-62.
- Andreev, S.I. and N.V. Filimonova, "Ranneslavianskie kul'tury v Tambovskoi obl.," in *Verkhnee Podon'e: arkheologija, istorija. Vypusk 3 k 65-letiju so dnia rozhdeniia B.A. Folomeeva (1942-2001) i 25-letiju so dnia nachala arkheologo-geograficheskikh rabot na Kulikovom pole (1982-2007)*, eds. O.V. Burova, A.N. Naumov, and N.F. Fomin (Tula, 2009), 18-24.
- Androshchuk, Fedir O., *Vikings in the East. Essays on Contacts Along the Road to Byzantium (800-1100)*. *Studia Byzantina Uppsaliensia*, 14 (Uppsala, 2013).
- Angelkou, Evangelia, "Ergaleia kai egrasteriakes drasteriotetes stis Louloudies Kitrous," in *Archaiologika tekmeria biotechnikon enkatastaseon kata te Byzantine epoche 50s-150s aionas. Eidiko thema tou 22ou Symposiou Byzantines kai metabyzantines archaiologias kai technes, Athena, 17-19 Maiou 2002* (Athens, 2004), 61-72.
- Angelova, Stefka and Ivan Bächvarov, "Käm topografiata na käsnoantichniia Durostorum," in *Sbornik v pamet na akademik D.P. Dimitrov*, eds. K. Rabadzhev, Khr. Popov, M. Damianov and V. Kacarova (Sofia, 2013), 560-68.
- Angelova, Stefka and Rumiana Koleva, "Arkheologicheski danni za rannoto slaviansko zaselvane v Bälgariia," *Godishnik na Sofijskiiia Universitet "Kliment Ohridski". Istoricheski Fakultet* 2 (2000), 159-85.
- Anghel, Gheorghe and Mihai Blăjan, "Săpăturile arheologice de la Sînmiclăuş (com. Şona, jud. Alba)," *Apulum* 15 (1977), 285-307.



- Anghelinu, Mircea, "Failed revolution: Marxism and the Romanian prehistoric archaeology between 1945 and 1989," *AB* 11, no. 1 (2007), 1–36.
- Anke, Bodo, László Révész, and Tivadar Vida. *Reitervölker im Frühmittelalter: Hunnen, Awaren, Ungarn* (Stuttgart, 2008).
- Antonaras, Anastasios, "Glass working activities in late Roman-early Christian Thessaloniki. Local workshops and vessels," in *Glass in Byzantium. Production, Usage, Analyses. International Workshop Organized by the Byzantine Archaeology Mainz, 17–18 January 2008, Römisch-Germanisches Zentralmuseum Mainz*, eds. J. Drauschke and D. Keller, RGZM Tagungen 8 (Regensburg, 2010), 93–105.
- Antonaras, Anastasios, "An early Christian glass workshop at 45, Vasileos Irakleiou Street in the centre of Thessaloniki," in *Neighbours and Successors of Rome. Traditions of Glass Production and Use in Europe and the Middle East in the Later 1st Millennium AD*, eds. D. Keller, J. Price, and C.M. Jackson (Oxford, 2014), 95–113.
- Antonaras, Anastasios, "Palaiochristianikoi yalolithoi megalou megethous apo te boreia Ellada," *AEMT* 28 (2014), 397–404.
- Antonaras, Anastasios, *Arts, Crafts, and Trades in Ancient and Byzantine Thessaloniki. Archaeological, Literary and Epigraphic Evidence*, Byzanz zwischen Orient und Okzident 2 (Mainz, 2016).
- Antonaras, Anastasios, "Artisanal production in Byzantine Thessaloniki (4th–15th century)," in *Hinter den Mauern und auf dem offenen Land. Leben im Byzantinischen Reich*, eds. F. Daim and J. Drauschke, Byzanz zwischen Orient und Okzident 3 (Heidelberg, 2017a), 113–40.
- Antonaras, Anastasios, *Glassware and Glassworking in Thessaloniki, 1st century BC–6th century AD*, Archaeopress Roman Archaeology 27 (Oxford, 2017b).
- Antonova, I.A., "Oboronitel'nye sooruzheniia Khersoneskogo porta v srednevekovogo epokhu," *ADSV* 7 (1971), 102–18.
- Arkhipov, G.A., "Arkheologicheskie svidetel'stva o remesle drevnikh mariicev," in *Iz istorii khoziaistva naseleniia Mariiskogo kraia*, eds. G.A. Arkhipov and G.A. Sepeev, Arkheologiia i etnografiia Mariiskogo kraia 4 (Ioshkar-Ola, 1979), 43–50.
- Artamonov, Mikhail I. *Srednevekovye poseleniia na nizhnem Donu (po materialam Severo-Kavkazskoi ekspedicii)*, Izvestiia Gosudarstvennoi Akademii istorii material'noi kul'tury im. N. Ia. Marra 131 (Leningrad: Gosudarstvennoe social'no-ekonomicheskoe izdatel'stvo, 1935).
- Arthur, Paul, *Naples, from Roman Town to City-State. An Archaeological Perspective*, Archaeological Monographs of the British School at Rome, 12 (London, 2002).
- Arthur, Paul, "Local pottery in Naples and northern Campania in the sixth and seventh centuries," in *Ceramica in Italia: VI–VII secolo. Atti del Convegno in onore di John W. Hayes, Roma, 11–13 maggio 1995*, ed. L. Sagui, Biblioteca di archeologia medievale 14 (Florence, 1998), 491–510.

- Arthur, Paul and Helen Patterson, "Local pottery in southern Puglia in the sixth and seventh centuries," in *Ceramica in Italia: VI–VII secolo. Atti del Convegno in onore di John W. Hayes, Roma, 11–13 maggio 1995*, ed. L. Sagù, Biblioteca di archeologia medievale 14 (Florence, 1998), 511–30.
- Asdracha, Catherine, "Inscriptions chrétiennes et protobyzantines de la Thrace orientale et de l'île d'Imbros (III<sup>e</sup>–VII<sup>e</sup> siècles). Présentation et commentaire historique," *AD* 53 (1998), 455–521.
- Ashby, Steven P., "With staff in hand, and dog at heel? What did it mean to be an 'itinerant' artisan?" in *Everyday Products in the Middle Ages. Crafts, Consumption and the Individual in Northern Europe c. AD 800–1600*, eds. G. Hansen, S.P. Ashby and I. Baug (Oxford/Philadelphia, 2015), 11–27.
- Ashikhmina, L.I., "Issledovaniia v basseine Vychegdyy," in *Arkheologicheskie otkrytiia 1984 goda*, ed. V.P. Shilov (Moscow, 1986), 3.
- Ashikhmina, L.I., "Issledovaniia Borganäel'skogo kompleksa na Nivshere," in *Arkheologicheskii otkrytiia 1985 goda*, ed. V.P. Shilov (Moscow, 1987), 163.
- Ashikhmina, L.I., "Zhertvennoe mesto Borganäel' v basseine srednei Nivshery," in *Polevoi simpozium "Sviatilishcha i zhertvennoe mesat' finno-ugorskogo naseleniia Evrazii"*, ed. A.F. Mel'nichuk (Perm, 1996), 5–6.
- Ashikhmina, L.I., A.V. Volokitin, K.S. Korolev, Eleonora A. Savel'eva and V.S. Stokolos, "Issledovaniia v Komi ASSR," in *Arkheologicheskie otkrytiia 1986 goda*, ed. V.P. Shilov (Moscow, 1988), 6–10.
- As'keev, Igor' V., Diliara N. Galimova, and Oleg v. As'keev, "Arkheozoologicheskie issledovaniia Tetiushskogo II gorodishcha (raskopki 2009 i 2010 gg.)," in *Issledovaniia po srednevekovoi arkheologii Evrazii*, ed. K.A. Rudenko (Kazan', 2012), 8–22.
- As'keev, Igor' V., Diliara N. Galimova and Oleg V. As'keev, "Pticy srednego Povolzh'ia v V–XVIII vv. n. e. (po materialam arkheologicheskikh raskopok)," *PV*, no. 3 (2013), 116–44.
- Atavin, Andrei G., "Pogrebeniia VII-nachalo VIII vv. iz Vostochnogo Priazov'ia," in *Kul'tury evraziiskikh stepei vtoroi poloviny I tysiacheletia n.e.*, eds. A.F. Kochkina, L.V. Kuznecova and D.A. Stashenkov (Samara, 1996), 208–64.
- Atgāzis, Māris, "Raskopki poseleniia Iaunlive," in *Arkheologicheskie otkrytiia 1975 goda*, ed. B.A. Rybakov (Moscow, 1976), 446.
- Atgāzis, Māris, "Arheolōģisko pieminekļu apzināšana Dobeles rajonā un izrakumi Anšķīnu senkapos 1977 gadā," *ZA S* (1977), 12–17.
- Atgāzis, Māris, "Raskopki mogil'nika Baliias-Shkerstaini i Aluksnenskogo zamka," in *Arkheologicheskie otkrytiia 1979 goda*, ed. B.A. Rybakov (Moscow, 1980), 384–85.
- Athané, François, *Pour une histoire naturelle du don* (Paris, 2011).

- Aulikh, Vitol'd V., "Metalevi priazhky i prykrasy z verkh'n'ogo goryzontu gorodyscha v s. Zymne, Volyns'koi oblasti," *Materyali i doslydzhennia z arkheologii Prykarpatt'ia i Volyni* 4 (1962), 92–105.
- Aulikh, Vitol'd V., "Sotsial'nyi zmist gorodyscha Zymne," in *Slov'iano-rus'ki starozhittosti*, ed. V.I. Bidzillia (Kiev, 1969), 54–58.
- Aulikh, Vitol'd V., *Zymnivs'ke gorodishche-slov'ians'ka pam'iatka VI–VII st. n. e.* (Kiev, 1972).
- Aun, Mare, "Ob issledovanii kurgannogo mogil'nika Rysna-Saare II," *ENSV* 29, no. 4 (1980), 368–72.
- Aun, Mare, "Pikk-kääbaste ehitusest," *Setumaa* 3 (2005), 97–120.
- Aun, Mare, Raili Allmaë, and Liina Maldre, "Pikk-kääbaste tähendusest (Rõsna küla kääbaskalmistute materjali alusel)," *SK* 4 (2008), 269–90.
- Aupert, Pierre, "Objets de la vie quotidienne à Argos en 585 ap. J.-C.," in *Etudes argiennes*, Bulletin de Correspondance Hellénique, Supplément 6 (Athens, 1980), 395–457.
- Auriemma, Rita and Elena Quiri, "La circolazione delle anfore in Adriatico tra V e VIII sec. d. C.," in *La circolazione delle ceramiche nell'Adriatico tra tarda Antichità e Altomedioevo. III incontro di studio CER.AM.IS*, eds. S. Gelichi and C. Negrelli, Ricerche. Series maior 5 (Mantua, 2007), 31–64.
- Avdusin, Daniil A., "Rivers, forests and the settlement pattern of the Eastern Slavs between the 6th and the 9th centuries," in *Montagnes, fleuves, forêts dans l'histoire: Barrières ou lignes de convergence? Travaux présentés au XVI-e Congrès international des sciences historiques, Stuttgart, août 1985*, ed. J.-F. Bergier (St. Katharinen, 1989), 135–46.
- Avenarius, Alexander, "Struktur und Organisation der europäischen Steppenvölker," in *Popoli delle steppe: Unni, Avari, Ungari*, vol. 1, Settimane di studio del Centro italiano di studi sull'alto Medioevo 35 (Spoleto, 1988), 125–50.
- Avenarius, Alexander, "Byzantska minca v nomadskom prostredi na srednom Dunaji," *SN* 10 (1989), 43–52.
- Avenarius, N.P., "Postavmukskie kurgany," *Zapiski Imperatorskago Russkago Arkheologicheskogo Obshchestva* 8, nos. 1–2 (1896), 178–87.
- Avramea, Anna, "Anekdota molybdoboulla apo ta nesia tou Argolikou kolpou," *Symmeikta* 10 (1996), 11–25.
- Avramea, Anna, *Le Peloponnèse du IV-e au VIII-e siècle. Changements et persistances*, Byzantina Sorbonensia 15 (Paris, 1997).
- Axboe, Morten, "Ein C-Brakteat aus Ungarn," *Acta Archaeologica* 49 (1978), 198–202.
- Babić, Boško, "Un tombeau paléo-byzantin des environs de Makedonski Brod avec annex de boucle d'oreille avec corbeillon," in *Rapports du III-e Congrès international d'archéologie slave. Bratislava, 7–14 septembre 1975*, ed. B. Chropovský, vol. 2 (Bratislava, 1980), 31–34.

- Babić, Boško, "Deneshnite teritorii na Republika Makedonija i Republika Albanija vo VII i VIII veka," in *Civilizacii na pochvata na Makedoniia*, vol. 2 (Skopje, 1995), 153–82.
- Băcucț Crișan, Dan and Sanda Băcucț Crișan, "Două locuințe prefeudale descoperite în județul Sălaj," *Acta Musei Porolissensis* 22, no. 1 (2000), 499–520.
- Băcucț Crișan, Dan and Ioan Bejinariu, "Vestigii arheologice din epoca migrațiilor descoperite la Bocșa 'Dealul Bancului' (jud. Sălaj)," in *Arheologie în context regional și european. Studii în onoarea lui Némethi János la aniversarea a 75 de ani*, ed. R. Gindele (Satu Mare, 2014), 227–44.
- Baczyńska, Barbara and Urszula Maj, "Wstępne wyniki badań na stanowisku wielokulturowym w Szarbi, woj. Kielce," *SArch* 33 (1981), 165–81.
- Bader, Otto N., "O vostochnom serebre i ego ispol'zovanii v drevnem Prikam'e," *Na zapadnom Urale* 1 (1951), 182–200.
- Bagautdinov, Riza S., A.V. Bogachev, and Sergei E. Zubov, *Prabolgary na srednei Volge. U istokov istorii tatar Volgo-Kam'ia* (Samara, 1998).
- Bagin, A.L. and N.N. Chesnokova, "Kostiannye nakonechniki strel iz Pechorskikh peshchernykh sviatilishch (1-a pol. I tys. n.e.-1-a tret' II tys. n. e.," in *Problemy istorii Rossii XVIII–XX vekov. Nauchnye chteniia pamiati professora Iu. D. Margolisa*, ed. A. Nenakhov (Syktyvkar, 1997), pp. 140–62.
- Bajkai, Rozália, "Avar kori településrészetek Kántorjánosi és Pócspetri határában," in *Ante viam stratam. A Magyar Nemzeti Múzeum megelőző feltárásai Kántorjánosi és Pócspetri határában az M3 autópálya nyírési nyomvonalán*, eds. Á. Szabó and Zs. Masek (Budapest, 2012), 407–80.
- Bajkai, Rozália, "On the agrarian technology of the Avar Period in Hungary. Grinding stones and quern-stones from Hajdúnánás-Mácsi-dűlő," in *Agrarian Technology in the Medieval Landscape. Ruralia X, 9th–15th September 2013, Smolenice Castle, Slovakia*, ed. J. Klápště (Turnhout, 2016), 407–27.
- Bakalov, Georgi, "Les ouvrages d'Agathias de Myrenée comme source de l'histoire des territoires balkaniques pendant la première moitié du VI-e siècle," *EB* 10, nos. 2–3 (1974), 196–207.
- Bakhshiev, I.I. and A.G. Kolonskikh, "Metody prostranstvennogo analiza v kharakteristika poselencheskoi struktury naseleniia Bakhmutinskogo kul'tury Ufimsko-Bel'skogo mezhdurech'ia," *PV*, no. 3 (2016), 59–82.
- Bakirtzis, Charalambos, "Imports, exports, and autarky in Byzantine Thessalonike from the seventh to the tenth century," in *Post-Roman Towns, Trade, and Settlement in Europe and Byzantium*, ed. J. Henning, vol. 2, Millennium-Studien 5 (Berlin/New York, 2007), 89–118.
- Bakó, Géza, "Oglinďirea formelor de proprietate în unele necropole din epoca feudală timpurie din Transilvania," *SCIV* 23, no. 1 (1972), 83–91.

- Bakó, Géza, "Despre organizarea obștilor sătești ale epocii feudale timpurii în sud-estul României," *SCIVA* 26, no. 3 (1975), 371–80.
- Balabanov, Todor, "Otnovo za gotite i episkopskiia centăr ot IV–V v. do s. Khan Krum, Shumensko," in *Velikotárnovskiiat universitet "Sv. sv. Kiril i Metodii" i bălgarskata arkheologiia*, ed. B. Borisov, vol. 1 (Veliko Tárnovo, 2010), 349–62.
- Bálint, Csanád, *Die Archäologie der Steppe. Steppenvölker zwischen Volga und Donau vom 6. bis zum 10. Jahrhundert* (Vienna/Cologne, 1989).
- Bálint, Csanád, "Methodologische Probleme der archäologischen Untersuchung der frühmittelalterlichen Gesellschaftsstrukturen bei den Steppenvölkern," in *The Prehistory of Asia and Oceania. The Evolution of Nomadic Herding Civilisations in the Northern European Steppes: the Tools of Archaeology and History Compared*, eds. M. Tosi and G.E. Afanas'ev, *The Colloquia of the XIII International Congress of Prehistoric and Protohistoric Sciences 16* (Forlì, 1996), 115–20.
- Bálint, Csanád, "Der Reichtum der Awaren. 'Fürstengräber', Prunkgräber, Schatzfunde," in *Herrschaft, Tod, Bestattung. Zu den vor- und frühgeschichtlichen Prunkgräbern als archäologisch-historische Quelle. Internationale Fachkonferenz Kiel, 16.–19. Oktober 2003*, eds. C. von Carnap-Bornheim, D. Krause, and A. Wesse, *Universitätsforschungen zur prähistorischen Archäologie 139* (Bonn, 2006), 147–59.
- Bálint, Csanád, "Avar goldsmith work from the perspective of cultural history," in *"Intelligible Beauty". Recent Research on Byzantine Jewellery*, eds. C. Entwistle and N. Adams (London, 2010), 146–60.
- Bálint, Marianna, "Az avar kor köbetétes övei," in *A népvándorlások kutatóinak kilencedik konferenciája. Eger, 1998, szeptember 18–20*, ed. T. Petercsák vol. 2 (Eger, 2000), 125–34.
- Balla, Márta, "Provenance studies of Avar ceramics by neutron activation analysis," *WMME* 15 (1990), 131–33.
- Balogh, Csilla, "Avar kori juhbőrös temetkezés Szabadszállás, B. gyakorlótéren," *Régészeti Kutatások Magyarországon* (2003), 75–83.
- Balogh, Csilla, "Avar kori ló, lovas és lószerszámos temetkezések a Duna—Tisza között," in *"In terra quondam Avarorum ..."* *Ünnepi tanulmányok H. Tóth Elvira 80. születésnapjára*, eds. A. Somogyvári and Gy. Székely, *Archaeologia Cumanica 2* (Kecskemét, 2009), 9–42.
- Balogh, Csilla, "Csontlemezes skatulyák és dobozók a Kárpát-medence avar kori anyagban," *DENMER* 19 (2014), 131–58.
- Balogh, Csilla, "A homokrévi 8. sír faragott csontlemezei. Új adatok az avar kori tegezkek típusaihoz," in *... in nostra lingua Hringe nominant. Tanulmányok Szenpéteri József 60. születésnapja tiszteletére*, eds. Cs. Balogh, Zs. Petkes, B. Sudár and Zs. Zsidai (Budapest/Kecskemét, 2015), 39–72.

- Balogh, Csilla, "Kárpát havzasai'nda bir avar yay ustasının mezar kalıntılarını eski türklérde bileşik," *Art Sanat* 6 (2016), 109–20.
- Balogh, Csilla, "Orta Tisa bölgesi'nde doğu avrupa bozkır kökenli göçebe bir topluluğa ait mezarlık 'Makó, Mikócsa-Halom, Macaristan,'" *Art Sanat* 7 (2017), 53–70.
- Balogh, Csilla, "They Vanished Away like the Avars ..." *Avar Period Cemetery in Zamárdi-Rétiföldek* (Budapest, 2018).
- Balogh, Csilla, "Új szempont a kora avar hatalmi központ továbbélésének kérdéséhez. Az avar fegyveres réteg temetkezései a Duna-Tisza közén," in *Hatalmi központok az avar kaganátusban*, eds. Cs. Balogh, J. Szentpéteri and E. Wicker (Kecskemét, 2019), 115–38.
- Balogh, Csilla and Erika Wicker, "Avar nemzetségfő sírja Petőfiszállás határából," in *Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére*, ed. T. Vida (Budapest, 2012), 551–82.
- Baltag, Gheorghe, "Date pentru un studiu arheologic al zonei municipiului Sighişoara," *Marisia* 9 (1979), 75–106.
- Balvanović, Roman, Milica Marić Stojanović, and Žiga Šmit, "Exploring the unknown Balkans: early Byzantine glass from Jelica Mt. in Serbia and its contemporary neighbors," *Journal of Radioanalytical and Nuclear Chemistry* 317, no. 2 (2018), 1175–89.
- Banaji, Jairus, *Agrarian Change in Late Antiquity. Gold, Labour, and Aristocratic Dominance*, 2nd ed. (Oxford, 2007).
- Banaji, Jairus, "Aristocracies, peasantries and the Framing of the Early Middle Ages," *Journal of Agrarian Change* 9, no. 1 (2009), 59–91.
- Banaji, Jairus, *Exploring the Economy of Late Antiquity. Selected Essays* (Cambridge, 2015).
- Banner, János, "Asatások a hódmezővásárhelyi határ batidai és gorzsai részében," *Dolgozatok a Ferenc József-Tudományegyetem Régiségtudományi Intézetéből* 9–10 (1933–1934), 251–71.
- Baran, Iaroslav V., "Planirovochnaia struktura zhilykh kompleksov slavianskogo poseleniia Rashkov I na Srednem Dnestre i ee social'noe znachenie," in *Trudy V Mezhdunarodnogo Kongressa arkheologov-slavistov, Kiev 18–25 sentiabria 1985 g.*, ed. P.P. Tolochko, vol. 2 (Kiev, 1988), 15–20.
- Baran, Iaroslav V., "Slov'ians'ka obshchyna (za materialamy poselennia Rashkiv I)," in *Problemy pokhodzhennia ta istorichnogo rozvytku slov'ian. Zbirnyk naukovykh statey prysviacheny 100-richchii z dnia narodzhennia Viktora Platonovycha Petrova*, eds. V.D. Baran, R.V. Terpylov's'kyi, and N.S. Abashina (Kiev, 1997), 176–83.
- Baran, Iaroslav V. and A.A. Kozlov's'kyi, "Die Nomaden der südrussischen Steppen im 1. und beginnenden 2. Jahrtausend n. Chr.," in *Gold der Steppe. Archäologie der Ukraine*, eds. R. Rolle, M. Müller-Wille and K. Schietzel (Neumünster, 1991), 233–38.
- Baran, Volodymyr D., *Ranni slov'iani mia Dnestrom i Pripiat'iu* (Kiev, 1972).

- Baran, Volodymyr D., "Die frühslawische Siedlung von Raškov, Ukraine," *Beiträge zur allgemeinen und vergleichenden Archäologie* 8 (1986), 73–175.
- Baran, Volodymyr D., *Pražskaia kul'tura Podnestrov'ia po materialam poselenii u s. Rashkov* (Kiev, 1988).
- Baran, Volodymyr D., *Slov'ians'ke poselennia seredyny I tysiacholittia nashoi ery bilia sela Teremtsi na Dnistri* (Kiev, 2008).
- Baran, Volodymyr D. and S.P. Pachkova, "Poselenie poblyzhu s. Gorosheve na sredn'omu Dnistri," *Arkheolohiia* 18 (1975), 87–95.
- Baranowski, Tadeusz, "Pochówki koni z Tumian w woj. Olsztyńskim," *APol* 41 (1996), 65–130.
- Baranowski, Tadeusz, "Fundkatalog (Metall-, Knochen- und Geweihfunde), mit Kommentar," in *Völkerwanderungszeitliche Siedlung von Tumiany (Daumen) im Kreise Allerstein*, ed. T. Baranowski, *Vetera et nova* 7 (Warsaw, 2017), 445–66.
- Baranowski, Tadeusz, and Robert Żukowski, "Lageplan und Bebauung der Tumiany-Siedlung," in *Völkerwanderungszeitliche Siedlung von Tumiany (Daumen) im Kreise Allerstein*, ed. T. Baranowski, *Vetera et nova* 7 (Warsaw, 2017), pp. 329–40.
- Barbiera, Irene, "Sixth-century cemeteries in Hungary and Italy: a comparative approach," in *Die Langobarden. Herrschaft und Identität*, eds. W. Pohl and P. Erhard, *Forschungen zur Geschichte des Mittelalters* 9 (Vienna, 2005), 301–20.
- Bárdos, Edit, "La necropoli avara di Zamárdi," in *L'oro degli Avari. Popolo delle steppe in Europa*, eds. E.A. Arslan and M. Buora (Milan, 2000), 76–141.
- Bárdos, Edit and Éva Garam, *Das awarenzeitliche Gräberfeld in Zamárdi-Rétiföldek*, *Monumenta Avarorum Archaeologica* 9 (Budapest, 2009).
- Barford, Paul M., Zbigniew Kobyliński, and Dariusz Krasnodębski, "Between the Slavs, Balts and Germans: ethnic problems in the archaeology and history of Podlasie," *ArchPol* 29 (1991), 123–60.
- Bárcoczi, László, "A 6th century cemetery from Keszthely-Fenekpuszta," *AAASH* 20 (1968), 275–311.
- Barnea, Alexandru, "Prosopographia Scythiae Minoris nach den epigraphischen und sphragistischen Quellen von 284 bis zum 7. Jh.," in *Siegel und Siegler. Akten des 8. internationalen Symposions für byzantinische Sigillographie*, ed. C. Ludwig, *Berliner byzantinische Studien* 7 (Frankfurt a.M./Berlin/Bern, 2005), 1–29.
- Barnea, Ion, "Sceau de Constantin IV empereur de Byzance, trouvé à Durostorum," *Revue Roumaine d'Histoire* 20 (1981), 625–28.
- Baron, Henriette, Anna Reuter, and Nemanja Marković, "Rethinking ruralization in terms of resilience: subsistence strategies in sixth-century Caričin Grad in the light of plant and animal bone finds," *Quaternary International* 499 (2019), 112–28.
- Bartosiewicz, László, "Animal remains from the Avar period cemetery of Budakalász-Dunapart," *AAASH* 47 (1995), 241–55.

- Bartosiewicz, László, "Archaeology in Hungary, 1948–1989," in *Archaeology of the Communist Era. A Political History of Archaeology of the 20th Century*, ed. L.R. Lozny (Cham, 2016), 195–233.
- Bartosiewicz, László, "Animal remains in the Avar cemetery of Szegvár-Szőlőkálja," in *Lebenswelten zwischen Archäologie und Geschichte. Festschrift für Falko Daim zu seinem 65. Geburtstag*, eds. J. Drauschke et al., Monographien der Römisch-Germanischen Zentralmuseums, 150.1 (Mainz, 2018), 43–56.
- Bartosiewicz, László and Alice M. Choyke, "Animal remains from the 1970–1972 excavations of Iatrus (Krivina), Bulgaria," *AAASH* 43 (1991), 181–209.
- Bartosiewicz, László, Anna Zsófia Biller, and Alice M. Choyke, "Középvár nyúlláb függők a Magyar Nemzeti Múzeum gyűjteményéből," in *Avarok pusztái. Régészeti tanulmányok Lőrinczy Gábor 60. születésnapjára*, eds. A. Anders, Cs. Balogh and A. Türk, *Opitz Archaeologica* 6 (Budapest, 2014), 325–36.
- Bârzu, Ligia, "La station no. 1 de Bratei, dép. de Sibiu (IV<sup>e</sup>–VII<sup>e</sup> siècles)," *Dacia* 38–39 (1994–1995), 239–95.
- Bârzu, Ligia, *Ein gepidisches Denkmal aus Siebenbürgen. Das Gräberfeld 3 von Bratei*, *Archaeologia Romanica* 4 (Cluj-Napoca, 2010).
- Batty, Roger. *Rome and the Nomads. The Pontic-Danubian Realm in Antiquity* (Oxford, 2007).
- Bavec, Uroš. "Arheološko najdišče in legenda o umrlih: primer Gorenji Mokronog," *Etnolog* 9, no. 1 (1999), 231–45.
- Bavec, Uroš. "Predhodno poročilo o poznoantičnem grobišču na Vrajku v Gorenjem Mokronogu," *AV* 54 (2003), 325–30.
- Bayman, James M. and Alan P. Sullivan III, "Property, identity, and macroeconomy in the Prehispanic Southwest," *American Anthropologist* 110, no. 1 (2008), 6–20.
- Beaudry, Nicolas, and Pascale Chevalier, "Le cœur économique du complexe épiscopal de Byllis (Albanie) au VI<sup>e</sup> siècle," *HAM* 20, no. 1 (2014), 206–15.
- Bede, Ilona, "The status of horses in late Avar-period society in the Carpathian Basin," in *The Very Beginning of Europe? Cultural and Social Dimensions of Early Medieval Migration and Colonisation (5th–8th Century). Archaeology in Contemporary Europe. Conference, Brussels, May 17–19, 2011*, eds. R. Annaert, T. Jacobs, I. In't Ven and S. Coppens, *Relicta Monografieën* 7 (Brussels, 2012), 41–50.
- Bede, Ilona, "Le cheval dans les rites funéraires de la période avar: une forme d'individuation? (fin du VI<sup>e</sup>-milieu du IX<sup>e</sup> siècle ap. J.-C.; Bassin des Carpates)," in *Rencontre autour de l'animal en contexte funéraire. Actes de la Rencontre de Saint-Germain-en-Laye des 30 et 31 mars 2012*, eds. I. Bede and M. Detante (Saint-Germain-en-Laye, 2014), 211–25.



- Begović, Vlasta and Ivančica Schrunck, "Preobrazbe rimskih vila na istočnom Jadranu u kasnoj antici i ranom srednjem vijeku," *Prilozi Instituta za arheologiju u Zagrebu* 18, no. 1 (2001), 157–72.
- Behr, Charlotte, "The power and function of images in northern Europe during the migration period," *Cultural and Social History* 7, no. 4 (2010), 453–66.
- Bejan, Adrian, "Un atelier metalurgic de la Drobeta-Turnu Severin," *AMN* 13 (1976), 257–68.
- Bekić, Luka, "Keramika praškog tipa u Hrvatskoj," in *Dani Sjepana Gunjače 2. Zbornik radova sa znanstvenog skupa "Dani Sjepana Gunjače 2", Hrvatska srednjovjekovna povijesno-arheološka baština, Međunarodne teme, Split, 18.–21. listopada 2011*, ed. T. Šeparović (Split, 2012), 1–15.
- Bekić, Luka, "New 14C dates from Slavic settlements in northwestern Croatia," in *The Early Slavic Settlement in Central Europe in the Light of New Dating Evidence*, eds. M. Dulnicz and S. Moździoch, *Interdisciplinary Medieval Studies* 3 (Wrocław, 2013), 237–50.
- Bekić, Luka, *Rani srednji vijek između Panonije i Jadrana. Ranoslavenski keramički i ostali arheološki nalazi od 6. do 8. stoljeća*, Monografije i katalogi 27 (Pula, 2016).
- Belavin, Andrei M. "Serebro Zakamskoe' v istorii i arkheologii Permskogo Predural'ia," *Vestnik Permskogo Nauchnogo Centra* 2 (2013), 50–61.
- Beliaev, O.S. and I.O. Molodchikova, "Pokhovannia kochivnykiv na r. Orel'," *Arkheolohiia* 28 (1978), 84–92.
- Beliaev, S.A., "Baziliki Khersonesa (itogi, problemy i zadachi iz izuchenii)," *VV* 50 (1989), 171–81.
- Belocerkovskaia, I.V., "Pogrebeniia s darami iz mogil'nika Korablino (po materialam raskopok 1986–1991 gg.)," in *Arkheologicheskii sbornik. Pogrebal'nyi obriad*, ed. I.V. Belocerkovskaia (Moscow, 1997), 20–28.
- Belocerkovskaia, I.V., "Raskopki mogil'nika Zarech'e v Riazanskoj oblasti," in *Arkheologicheskie otkrytiia 1999 goda*, eds. V.V. Sedov and N.V. Lopatin (Moscow, 2001), 61–62.
- Belošević, Janko, "Prvi arheološki tragovi velike seobe naroda na području sjeverne Dalmacije," *Diadora* 3 (1965), 129–43.
- Belošević, Janko, "Ranosrednjovjekovna nekropola u selu Kašić kraj Zadra," *Diadora* 4 (1968), 221–46.
- Bemmann, Jan, Katharina Schneider, Aleksandr G. Gercen and Sergei Chernysh. *Die frühmittelalterlichen Gräberfelder von Adym Čokrak, Južnyj I und Južnyj II am Fuße des Mangup*, Monographien des Römisch-Germanischen Zentralmuseums 108 (Mainz, 2013).
- Bencze, Sándor and András Morgós, "A Csepel-hárosi koraavar bronz lószerámdísz forrasztási módjának vizsgálata röntgenfluoreszcens elemzéssel," *MM* 7 (1980), 48–53.

- Bende, Livia, "Tausírozott diszú ővgarnitúra a pitvarosi avar temetőből," *MFMSA* 6 (2000), 199–218.
- Benecke, Norbert, "Archäozoologische Untersuchungen an Tierresten aus dem Kastell Iatrus," in *Iatrus-Krivina. Spätantike Befestigung und frühmittelalterliche Siedlung and der unteren Donau. VI. Ergebnisse der Ausgrabungen 1992–2000* (Mainz, 2007), 383–413.
- Benkő, Elek. *A középkori Keresztúr-szék régészeti topográfiája*, *Varia Archaeologica Hungarica* 5 (Budapest, 1992).
- Benvenuti, Marco, Marta Mariotti-Lippi, Pasquino Pallecchi, and Mario Sagri. "Late-Holocene catastrophic floods in the terminal Arno River (Pisa, Central Italy) from the story of a Roman riverine harbour," *The Holocene* 16, no.6 (2006), 863–76.
- Beranová, Magdalena, "Zpusob chovů dobytka u slovanů v 6.–10. století," in *Sborník referátů ze symposia "Slované 6.–10. století", Břeclav-Pohansko, 1978*, eds. B. Dostál and J. Vignatiová (Brno, 1980), 19–25.
- Beranová, Magdalena, "Types of Slavic agricultural production in the 6th–12th centuries," *Ethnologia Slavica* 16 (1984), 7–48.
- Beranová, Magdalena, "Otázka velikosti polností k výžive člověka, rodiny a vesnice u Slovanů i v pravěku," *AP* 7 (1986), pp. 151–70.
- Berciu, Dumitru and Eugen Comşa, "Săpăturile arheologice de la Balta Verde și Gogoșu," *MCA* 2 (1956), 403–05.
- Berend, Nora, "The mirage of East Central Europe. Historical regions in a comparative perspective," in *Medieval East Central Europe in a Comparative Perspective. From Frontier Zones to Lands in Focu*, eds. G. Jaritz and K.G. Szende (London/New York, 2016), 9–23.
- Berend, Nora, Przemysław Urbańczyk, and Przemysław Wiszewski, *Central Europe in the High Middle Ages. Bohemia, Hungary and Poland, c. 900-c. 1300* (Cambridge/New York, 2013).
- Berestnev, S.I. and M.V. Liubichev, "Novye dannye o pamiatnikakh pen'kovskoi kul'tury v basseinakh Severskogo Donca i Vorskly," in *Arkheologiiia slavianskogo iugo-vostoka*, ed. A.G. D'iachenko (Voronezh, 1991), 33–36.
- Berezovets', D.T., "Poseleniia ulichei na r. Tiasmine," in *Slaviane nakanune obrazovaniia Kievskoi Rusi*, ed. B.A. Rybakov, *Materialy i issledovaniia po arkheologii SSSR* 108 (Moscow, 1963), 145–208.
- Berezovets', D.T., "Mogil'niki ulichyv u doliny r. Tiasminu," in *Slov'iano-rus'ki starozhitnosti*, ed. V.I. Bidzillia (Kiev, 1969), 58–71.
- Berezuckii, V.D., P.M. Zolotarev, and E.A. Kucev, "Ostrogozhskii klad (poslednaia tret'-konec VII v. n. e.)," *RA*, no. 1 (2017), 131–40.
- Bergman, Ingela, and Greger Hörnberg, "Early cereal cultivation at Sámi settlements: challenging the hunter-herder paradigm?" *Arctic Anthropology* 52, no. 2 (2015), 57–66.

- Bernc, V.A. and Igor Iu. Pastushenko, "Raboty v Ius'venskom raione Komi-Permiackogo nacional'nogo okruga," in *Arkheologicheskie otkrytiia 2004 g.*, eds. S.V. Kuz'minykh, V.N. Lopatin and S.Z. Chernov (Moscow, 2005), 333–36.
- Bernc, V.A. and Igor Iu. Pastushenko, "Raboty v Ius'venskom raione Komi-Permiackogo AO," in *Arkheologicheskie otkrytiia 2005 goda*, ed. N.V. Lopatin (Moscow, 2007), 355.
- Bertašius, Mindaugas, "Zentrum und Peripherie bei den Westbalten. Zu den Beziehungen zwischen dem Samland und der Region um Kaunas vom 5. bis 8. Jh. n.Chr.," *ArchB* 4 (2000), 135–48.
- Bertašius, Mindaugas, *Marvelė. Ein Gräberfeld Mittellitauens* (Kaunas, 2005).
- Bertašius, Mindaugas, "Central Lithuanian cemeteries," in *A Hundred Years of Archaeological Discoveries in Lithuania*, ed. G. Zabiela, Z. Baubonis and E. Marcinkevičiūtė (Vilnius, 2016), 226–35.
- Beshevliev, Veselin, *Spätgriechische und spätlateinische Inschriften aus Bulgarien*, Berliner byzantinische Arbeiten 30 (Berlin, 1964).
- Beshevliev, Veselin, "Zu Theophanis *Chronographia* 359, 5–17," *BF* 2 (1967), 50–58.
- Biborski, Marcin, Piotr Puđo, Janusz Stepiński, and Gregorz Żabiński, "A 'barbarian' weapon? A sax find from the vicinity of Malbork in Prussia," in *Barbarians at the Gates. A Monograph Based on Material from the VI International Study Session on the History of the Peoples of the Baltic Sea, Wolin, 5–7 August 2011*, ed. M. Franz (Toruń, 2013), 27–53.
- Bidzillia, Vasyľ I., "Zalizoplyvyl'ni gorny seredyny I tsysacholittia n.e. na pivdenomu Buzi," *Arkheolohiia* 15 (1963), 123–44.
- Bieńkowski, Piotr, "O skarbie srebrnym z Chomiakowa na Wolyniu," *Światowit* 13 (1929), 149–81.
- Biermann, Felix, "Über das 'dunkle Jahrhundert' in der späten Völkerwanderungs- und frühen Slawenzeit im nordostdeutschen Raum," in *Die frühen Slawen—von der Expansion zu gentes und nationes. Beiträge der Sektion zur slawischen Frühgeschichte des 8. deutschen Archäologiekongresses in Berlin, 06.10. Oktober 2014. 1. Beiträge zum Schwerpunktthema*, eds. F. Biermann, T. Kersting and A. Klammt, Beiträge zur Ur- und Frühgeschichte Mitteleuropas 81.2 (Langenweissbach, 2016), 9–26.
- Biernacki, Andrzej B., *Wczesnobyzantyjskie elementy i detale architektoniczne Chersonezu Taurydzkiego (Architektura wczesnobyzantyjskich budowli sakralnych Chersonezu Taurydzkiego)*, Architektura wczesnobyzantyjskich budowli sakralnych Chersonezu Tauridzkiego 2 (Poznań, 2009).
- Biernacki, Andrzej B. and Elena Iu. Klenina, "Sakral'naia arkhitektura vizantiiskogo Khersona (po rezul'tatam raskopok i aerosnimkov)," *KS* 15 (2006), 37–58.
- Biernacki, Andrzej B. and Elena Iu. Klenina, "Early Byzantine coarse ware from Novae: production and chronology," in *LRCW 4 Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry*.

- The Mediterranean: a Market Without Frontiers*, eds. N. Poulou-Papadimitriou, E. Nodarou, and V. Kilikoglou vol. 1, BAR International Series 2616 (Oxford, 2014), 151–57.
- Bijsterveld, Arnoud-Jan A., “The medieval gift as agent of social bonding and political power: a comparative approach,” in *Medieval Transformations. Texts, Power, and Gifts in Context*, eds. Esther Cohen and Mayke B. de Jong (Leiden, 2001), 123–56.
- Bikić, Vesna and Vujadin Ivanišević, “Imported pottery in Central Illyricum—a case study: Caričin Grad (Iustiniana Prima),” *Rei cretariae romanae fautorum acta* 42 (2012), 41–49.
- Bileta, Vedran, “At the crossroads of Late Antiquity and the early Middle Ages—the rise and fall of the military elite of Byzantine Istria,” *Annual of Medieval Studies at the CEU* 17 (2011), 100–21.
- Bintliff, John L. “The contribution of region survey to the Late Antiquity debate: Greece in its Mediterranean context”. In A.G. Poulter (ed), *The Transition to Late Antiquity on the Danube and Beyond* (Oxford: Oxford University Press, 2007), pp. 649–78.
- Birk, Jago Jonathan, Ivan Bugarski, Sabine Fiedler, Vujadin Ivanišević, Henriette Kroll, Nemanja Marković, Anna Reuter, Constanze Rühl, Rainer Schreg, Aleksandar Stamenković, and Miriam Steinborn, “An imperial town in a time of transition. Life, environment, and decline of early Byzantine Caričin Grad,” in *LAC 2014 Proceedings*, available at <http://lac2014proceedings.nl/article/view/28> (visit of August 20, 2020).
- Biró-Sey, Katalin, “Silver medal of Anastasius I in the Numismatic Collection of the Hungarian National Museum,” *FA* 27 (1976), 121–27.
- Biró-Sey, Katalin, “A Pécsvárádi éremlelet,” *FA* 38 (1987), 171–92.
- Bitinas, Albertas, Aldona Damušytė, Miglė Stančikaitė, and Paulius Aleksa, “Geological development of the Nemunas River Delta and adjacent areas, West Lithuania,” *Geological Quarterly* 46, no. 4 (2002), 375–89.
- Bitrakova-Grozdanova, Vera, “Goled Grad de Prespa,” in *Spartacus II. 2075 godini ot vāstanieto na Spartak. Trako-rimski nasledstvo. 2000 godini khristianstvo. Mezhdunaroden simpozium 1–4 oktombri 2002 godina, Sandanski*, eds. A. Dimitrova-Milcheva and V. Kacarova (Veliko Tārnovo, 2006), 11–20.
- Blanton, Richard E., and Lane F. Fargher, “Evaluating causal factors in market development in premodern states: a comparative study, with critical comments on the history of ideas about markets,” in *Archaeological Approaches to Market Exchange in Ancient Societies*, eds. C.P. Garraty and B.L. Stark (Boulder, 2010), 207–26.
- Błażejowski, Artur, “Cultural changes in the upper basin for the Odra River at the close of Antiquity,” in *Landscapes and Societies in Medieval Europe East of the Elbe. Interactions Between Environmental Settings and Cultural Transformations*, eds. S. Kleingärtner, T.P. Newfield, S. Rossignol and D. Wehner, *Papers in Mediaeval Studies* 23 (Toronto, 2013), 27–41.

- Blaudeau, Philippe, "A stereotype of the Roman history of Monophysism? About the violent episode of Thessalonica (September 519)," *HAM* 10 (2004), 205–10.
- Bliujienė, Audronė, "Lithuanian amber artifacts in the middle of the first millennium and their provenance within the limits of [the] Eastern Baltic region," in *Baltic Amber. Proceedings of the International Interdisciplinary Conference "Baltic Amber in Natural Sciences, Archaeology and Applied Arts", 13–18 September 2001, Vilnius, Palanga, Nida*, ed. A. Butrimas, Vilniaus Dailės akademijos darbai 22 (Vilnius, 2001), 171–86.
- Bliujienė, Audronė, "Lamata—mikroregionas, etnokultūrinė sritis ar niekieno žemė tarp kuršių ir skalvių?" *Kultūros paminklai* 11 (2004), 61–78.
- Bliujienė, Audronė, "The greatest impersonations, or Some aspects of the origin of animal style in the eastern Baltic region during the Migration Period," in *Cultural Interaction Between East and West. Archaeology, Artefacts, and Human Contacts in Northern Europe*, eds. U. Fransson, M. Svedin, S. Bergerbrant and F.O. Androshchuk, Stockholm Studies in Archaeology 44 (Stockholm, 2007), 128–33.
- Bliujienė, Audronė, *Northern Gold. Amber in Lithuania (c. 100 to c. 1200)*, East Central and Eastern Europe in the Middle Ages, 450–1450, 18 (Leiden/Boston, 2011).
- Bliujienė, Audronė, *Romėniškasis ir tautų kraustymosi laikotarpiai* (Klaipėda, 2013).
- Bliujienė, Audronė, "The backcountry Balts (Aesti) and the 'northern gold' in Late Antiquity and the early Middle Ages," in *Neglected Barbarians*, ed. F. Curta, Studies in the Early Middle Ages 32 (Turnhout, 2010), 13–29.
- Bliujienė, Audronė, "The Curonians of the Lithuanian coast," in *A Hundred Years of Archaeological Discoveries in Lithuania*, eds. G. Zabiela, Z. Baubonis and E. Marcinkevičiūtė (Vilnius, 2016), 268–85.
- Bliujienė, Audronė, "South Lithuanian barrows," in *A Hundred Years of Archaeological Discoveries in Lithuania*, eds. G. Zabiela, Z. Baubonis and E. Marcinkevičiūtė (Vilnius, 2016), 208–25.
- Bliujienė, Audronė and Donatas Butkus, "VII a. pirmosios pusės karys iš Lazdininkų (Kalnalaukio)," *AL* 3 (2002), 81–99.
- Bliujienė, Audronė and Donatas Butkus, "Burials with horses and equestrian equipment on the Lithuanian and Latvian littorals and hinterlands (from the fifth to the eighth centuries)," *ArchB* 11 (2009), 149–63.
- Bliujienė, Audronė and Florin Curta, "Exotic lands, quixotic friends: Eastern Lithuania and the Carpathian Basin in the Late Antiquity and the early Middle Ages (c. 380 to c. 620)," *Medieval Archaeology* 55 (2011), 28–64.
- Bobi, Victor, "Contribuții la repertoriul arheologic al județului Vrancea (Dovezi ale continuității de locuire din secolele II–VII e. n.)," *Studii și comunicări (Focșani)* 4 (1981), 97–140.
- Bobninskii, A.A. *Kurgany i sluchainye arkeologicheskie nakhodki bliz mestechka Smely* (St. Petersburg: Balashev, 1901).

- Bocsi, Zsófia, "A nádudvari gepidák nyomában. Egy többbrétegű szarmata és gepida település feldolgozásának első lépései," in *Népék és kultúrák a Kárpát-medencében. Tanulmányok Mesterházy Károly tiszteletére*, eds. L. Kovács and L. Révész (Budapest, 2016), 23–80.
- Bodianskii, A.V., "Arkheologicheskie nakhodki v Dneprovskom Nadporozh'e," *SA*, no. 1 (1960), 274–77.
- Boege, W., "Ein Beitrag zum Formenkreis der wandalischen Irdenware aus der Völkerwanderungszeit," *Altschlesien* 7 (1937), 44–59.
- Bogachev, Aleksei V., "Bol'shoi dom Staro-Mainskogo gorodishcha," in *Arkheologicheskie issledovaniia v lesostepnom Povol'zhe. Mezhhvuzovskii sbornik statei*, ed. G.I. Matveeva (Samara, 1991), 159–71.
- Bogachev, Aleksei V. and Sergei E. Zubov, "Brusianskii II mogil'nik rannikh bolgar (raskopki 1988–1989 gg.)," in *Novoe v srednevekovoi arkheologii Evrazii*, ed. V.B. Kovalevskaia (Samara, 1993), 19–41.
- Bogachev, Aleksei V., S.F. Ermakov, and A.A. Khokhlov, "Vypolzovskii I kurgannyi mogil'nik rannikh bolgar na Samarskoi luke," in *Kul'tury evraziiskikh stepei vtoroi poloviny I tysiacheletia n. e.*, eds. A.F. Kochkina, L.V. Kuznecova, and D.A. Stashenkov (Samara, 1996), 83–98.
- Bogachev, Aleksei V., Leonid A. Viazov, V.V. Gasilin, V.N. Myshkin, and D.V. Serykh, "Karmalinskoe gorodishche," in *Srednevekov'e. Velikoe pereselenie narodov*, ed. A.V. Bogachev (Samara, 2013), 119–63.
- Bogdan-Cătăniciu, Ioana, "Die letzte Siedlungsphase der Civitas von Tropaeum Traiani bei Adamclisi (6.–7. Jh. u.Z.)," *Südost-Forschungen* 38 (1979), 184–90.
- Bogucki, Mateusz, "Grobniça—a sign of the future. Early ports of trade in the Balt lands," in *Transformatio Mundi. The Transition from the Late Migration Period to the Early Viking Age in the East Baltic*, ed. M. Bertašius (Kaunas, 2006), 93–106.
- Bogucki, Mateusz, "Before the Vikings. Foreigners in the lower Vistula region during the Migration Period and the origins of Truso," in *Scandinavian Culture in Medieval Poland*, eds. S. Moździoch, B. Stanisławski and P. Wiszewski, *Interdisciplinary Medieval Studies* 2 (Wrocław, 2013), 81–111.
- Bogucki, Mateusz, Michał Auch, Beata Jurkiewicz, and Maciej Trzeciecki, "Ślad osadniczy z późnego okresu wędrówek ludów na stanowisku Janów Pomorski 1," in *Janów Pomorski, stan. 1. Wyniki ratowniczych badań archeologicznych w latach 2007–2008*, eds. M. Bogucki and B. Jurkiewicz, vol. 1, part 2, *Studia nad Truso* 1.2 (Elbląg, 2012), 10–20.
- Boiadzhiev, Andrei and Georgi Krăstev, "On the dating of Codex Suprasliensis," in *Preotkrivane: Suprasalski sbornik starobalgarski pametnik ot X vek*, ed. A. Miltenova (Sofia, 2012), 17–23.
- Bökönyi, Sándor, "Examen des os d'animaux découverts au cimetière avar de Kiskörös-Városalatt," *Anthropologia Hungarica* 34 (1955), 211–16.

- Bollók, Ádám, "Byzantium on the Theiss. Of Byzantine diplomacy, the emperor's image and the Avars," in *Many Romes. Studies in Honor of Hans Belting*, eds. I. Foletti and H.L. Kessler (Turnhout, 2015), 166–81.
- Bolta, Lojze, "Rifnik—provinzialrömische Siedlung und Gräberfeld," in *Problemi seobe naroda u Karpatskoj kotlini. Saopštenja sa naučkog skupa 13.–16. decembre 1976*, eds. D. Dimitrijević, J. Kovačević, and Z. Vinski (Belgrade, 1978), 49–56.
- Bolta, Lojze, *Rifnik pri Šentjurju. Poznoantična naselbina in grobišče*, Katalogi in monografije 19 (Ljubljana, 1981).
- Boltin-Tome, Elica, "Predloka, antična in zgodnj srednjeveška lokaliteta," *Izdanja Hrvatskog arheološkog društva* 11 (1986), 189–207.
- Bóna, István, "Die Langobarden in Ungarn. Die Gräberfelder von Várpalota und Bezenye," *AAASH* 7 (1956), 183–242.
- Bóna, István, "A szentendrei langobard temető régészeti elemzése az embertani és a kémiai vizsgálatok fényében," *Régészeti Dolgozatok* 9 (1968), 33–40.
- Bóna, István, "Langobarden in Ungarn (Aus den Ergebnissen von 12 Forschungsjahren)," *AV* 21–22 (1970–1971), 45–74.
- Bóna, István, "L'agglomération avar de Dunaujváros: les différentes périodes," *Mitteilungen des archäologischen Instituts der Ungarischen Akademie der Wissenschaften* 1 (1972), 25–33.
- Bóna, István, *VII. századi avar települések és Arpád-kori magyar falu Dunaujvárosban* (Budapest, 1973).
- Bóna, István, *The Dawn of the Dark Ages. The Gepids and the Lombards in the Carpathian Basin* (Budapest, 1976).
- Bóna, István, "A szegvár-sárpoldali lovassír. Adatok a korai avar temetkezési szokásokhoz," *AE* 106 (1979), 3–32.
- Bóna, István, "Byzantium and the Avars: the archaeology of the first 70 years of the Avar era," in *From the Baltic to the Black Sea. Studies in Medieval Archaeology*, eds. D. Austin and L. Alcock (London, 1990), 113–18.
- Bóna, István, "Das langobardenzeitliche Gräberfeld von Hegykő, Komitat Győr-Sopron," in *Man and the Animal World. Studies in Archaeozoology, Archaeology, Anthropology, and Palaeolinguistics in Memoriam Sándor Bökönyi*, ed. P. Anreiter, *Archaeolingua* 8 (Budapest, 1998), 109–20.
- Bóna, István, "Befejező ásatás a bezenyei langobard temetőben," *Arrabona* 39 (2001), 189–205.
- Bóna, István, *Les Huns. Le grand empire barbare d'Europe (IV<sup>e</sup>–V<sup>e</sup> siècles)* (Paris, 2002).
- Bóna, István and Jolán B. Horváth, *Langobardische Gräberfelder in West-Ungarn*, *Monumenta Germanorum Archaeologica Hungariae* 6 (Budapest, 2009).
- Bóna, István and Margit Nagy, *Gepidische Gräberfelder am Theissgebiet I.*, *Monumenta Germanorum Archaeologica Hungariae* 1 (Budapest, 2002).

- Bonifay, Michel, "Observations sur la diffusion des céramiques africaines en Méditerranée orientale durant l'Antiquité tardive," in *Mélanges Jean-Pierre Sodini*, eds. F. Baratte, V. Déroche, C. Jolivet-Lévy, and B. Pitarakis, *Travaux et mémoires* 15 (Paris, 2005), 565–81.
- Borisov, Boris, "Issledovanie rannevizantiiskoi keramiki iz Slivenskogo okruga," *Thracia* 8 (1988), 90–118.
- Borisova, V.V., "Mogyl'nyk u visoti 'Sakharnaia golovka,'" *KS* 5 (1959), 169–205.
- Borodin, O.R., "Rimskii papa Martin I i ego pisma iz Kryma (stat'ia, perevod, komentarii)," in *Prichernomor'e v srednie veka. K XVIII Mezhdunarodnomu kongressu vizantinistov*, ed. S.P. Karpov (Moscow, 1991), 173–90.
- Borojević, Ksenija, "Analiza ugljenisanog semenja sa lokaliteta Svetinja," *Starinar* 38 (1987), 65–71.
- BoroneaŃ, Vasile and Ion Sîngă, "Cercetările privind secolul al VII-lea de la Ostrovu Mare, com. Gogoșu din zona hidrocentralei 'Porțile de Fier II,'" *Drobeta* 3 (1978), 87–107.
- Borri, Francesco, "Gli Istriani e i loro parenti. Fraggioi, Romani e Slavi nella periferia di Bisanzio," *JOB* 60 (2010), 1–25.
- Bospachieva, Mina, "The eastern necropolis of Philipopolis in the light of the latest archaeological investigations," *Thracia* 12 (1998), 147–57.
- Böttger, Burkhard. "Die Importkeramik aus dem spätantiken Donauleskastell Iatrus in Nordbulgarien (Zu Aspekten ihrer wirtschaftshistorischen Interpretation)," in *Actes du IX-e Congrès international d'études sur les frontières romaines, Mamaia 6–13 sept. 1972*, eds. D.M. Pippidi and M. Kandler (Bucharest/Cologne, 1974), 131–36.
- Bouras, Charalambos, *Byzantine and Post-Byzantine Architecture in Greece* (Athens, 2006).
- Bourbou, Chryssi, "To live and die in a turbulent era. Bioarchaeological analysis of the early Byzantine (6th–7th centuries AD) population from Sourtara Galaniou Kozanis (northern Greece)," *DOP* 63 (2009), 221–34.
- Bourbou, Chryssi and Agathoniki Tsilipakou, "Investigating the human past of Greece during the 6th–7th centuries A.D.," in *New Directions in the Skeletal Biology of Greece*, eds. L.A. Schepartz, S.C. Fox, and C. Bourbou, *Hesperia Supplement* 43 (Athens, 2009), 121–36.
- Bourbou, Chryssi, Benjamin T. Fuller, Sandra Jean Garvie-Lok, and Michael P. Richards, "Reconstructing the diets of Greek Byzantine populations (6th–15th centuries AD) using carbon and nitrogen stable isotope ratios," *American Journal of Physical Anthropology* 146, no. 4 (2011), 569–81.
- Bourdieu, Pierre, *Esquisse d'une théorie de la pratique, précédé de trois études d'ethnologie kabyle*, *Travaux de droit d'économie, de sociologie et de sciences politiques* (Geneva, 1972).



- Bowden, William, "Urban change and the Triconch Palace site in the 5th to 7th centuries," in *Butrint 3. Excavations at the Triconch Palace*, eds. W. Bowden and R. Hodges, *Butrint Archaeological Monographs 3* (Oxford/Oakville, 2011), 303–18.
- Bowden, William, "Social anxiety and the reemergence of furnished burial in post-Roman Albania," in *Death and Changing Rituals. Function and Meaning in Ancient Funerary Practices*, eds. J.R. Brandt, M. Prusac and H. Roland (Oxford/Philadelphia, 2014), 343–58.
- Bowden, William, Karen Francis, Oliver Gilkes and Kosta Lako, "The 5th- to mid 7th-century occupation of the triconch area," in *Butrint 3. Excavations at the Triconch Palace*, eds. W. Bowden and R. Hodges, *Butrint Archaeological Monographs 3* (Oxford/Oakville, 2011), 56–117.
- Bowden, William, Zoe Knapp, Adrienne Powell and James Westoby, "The faunal remains," in *Butrint 5: The Life and Death at a Mediterranean Port*, ed. W. Bowden, *Butrint Archaeological Monograph Series 5* (Oxford, 2020), 25–41.
- Bowes, Kim, "The Durrës amphitheatre: archaeology and memory," in *New Directions in Albanian Archaeology. Studies Presented to Muzafer Korkuti*, eds. L. Bejko and R. Hodges (Tirana, 2006), 242–56.
- Bozhkova, A., Khristo Preshlenov, Metodi Daskalov, and P. Kiiashkina. "Spasitelni arkeologicheski razkopki na ul. Kraiberezhna v AAR Starinen Nesebär prez 2006," *AOR* (2006), 247–50.
- Brachmann, Hansjürgen., "Slawen an der östlichen Peripherie des fränkischen Reiches. Beobachtungen zu sozialen und ethnischen Ausgleich im Feudalisierungsprozess," in *Zbornik posveten na Boshko Babich. Mélange Boško Babić 1924–1984*, ed. M. Apostolski (Prilep, 1986), 59–65.
- Brandes, Wolfram, *Die Städte Kleinasiens im 7. und 8. Jahrhundert*, *Berliner byzantinische Arbeiten 56* (Berlin, 1989).
- Brather, Sebastian, *Archäologie der westlichen Slawen. Siedlung, Wirtschaft und Gesellschaft im früh- und hochmittelalterlichen Ostmitteleuropa*, *Ergänzungsbände zum Reallexikon der germanischen Altertumskunde 61* (Berlin/New York, 2001).
- Brather, Sebastian, "Memoria und Repräsentation. Frühmittelalterliche Bestattungen zwischen Erinnerung und Erwartung," in *Historia archaeologica. Festschrift für Heiko Steuer zum 70. Geburtstag*, eds. S. Brather, D. Geuenich, and C. Huth, *Ergänzungsbände zum Reallexikon der germanischen Altertumskunde 70* (Berlin/New York, 2009), 247–84.
- Brather, Sebastian, "The Western Slavs of the seventh to the eleventh century—an archaeological perspective.," *History Compass* 9, no. 6 (2011), 454–73.
- Braychevs'ka, A.T., "Kuznica na Pastyrskom gorodishche," *KSI AU* 9 (1959), 99–103.
- Braychevs'kyi, Mykhailo Iu., "Pastyrs'kyi skarb 1949 r.," *Arkheolohiia*, no. 7 (1952), 161–73.
- Braychevs'kyi, Mykhailo Iu., "Periodyzatsiia istorychnogo rozvytku skhidnoi Evropy v I tys. n. e.," *Arkheolohiia*, no. 3 (1994), 13–18.

- Brodka, Dariusz, "Die Wanderung der Hunnen, Vandalen, West- und Ostgoten— Prokopius von Kaisareia und seine Quellen," *Millennium* 10 (2013), 13–37.
- Brown, Alexander, "Vegetation change in Prussia: the palynological data," in *Environment, Colonization and the Baltic Crusader States. Terra Sacra I*, ed. A. Pluskowski, Environmental Histories of the North Atlantic World 2 (Turnhout, 2019), 293–332.
- Brubaker, Leslie, and John F. Haldon, *Byzantium in the Iconoclastic Era, c. 680–850* (Cambridge/New York, 2011).
- Brüggemann, Karsten, Detlef Henning, Konrad Maier and Ralph Tuchtenhagen (eds.), *Das Baltikum. Geschichte einer europäischen Region. 1. Von der Vor- und Frühgeschichte bis zum Ende des Mittelalters* (Stuttgart, 2018).
- Brukner, Olga, "The sixth century necropolis at Vajska," in *Sirmium. Recherches archéologiques en Syrmie*, eds. N. Duval, E.L. Ochsenschlager and V. Popović, vol. 4 (Belgrade, 1982), 29–41.
- Brumfiel, Elizabeth M., and Timothy K. Earle, "Specialization, exchange, and complex societies: an introduction," in *Specialization, Exchange, and Complex Societies*, eds. E. Brumfiel and T.K. Earle (Cambridge/New York, 1987), 1–9.
- Brunšmid, Josip, "Novci gepidskog kralja Kunimunda," in *Bulićev zbornik. Naučni prilozi posvećeni Franu Buliću prigodom LXXV. godišnjice njegova života od učenika i prijatelja IV. oktobra MCMXXI*, eds. M. Abramić and V. Hoffiller (Zagreb/Split, 1924), 671–73.
- Bryson, Reid A. "On integrating climatic change and culture change studies," *Human Ecology* 22, no. 1 (1994), 115–28.
- Brzostowicz, Michał, *Bruszczewski zespół osadniczy we wczesnym średniowieczu*, Bibliotheca Fontes Archaeologici Posnanienses 10 (Poznań, 2002).
- Bubeník, Josef, "Staroslovanské sídliště v Kadani," *AR* 23 (1972), 373–86.
- Budak, Neven, "One more Renaissance? Dalmatia and the revival of the European economy," in *Imperial Spheres and the Adriatic. Byzantium, the Carolingians and the Treaty of Aachen (812)*, eds. M. Ančić, J. Shepard, and T. Vedriš (London/New York, 2017), 174–92.
- Bugarški, Ivan, "The geomorphological matrix as a starting point for determining the position of Avar-time settlements in Pannonia: the example of the Bačka region," *Archäologisches Korrespondenzblatt* 38 (2008), 437–55.
- Bugarški, Ivan, *Nekropole iz doba antike i ranog srednjeg veka na lokalitetu Čik*, Posebna izdanja 46 (Belgrade, 2009).
- Bugarški, Ivan, "Carved antler tools from Nosa and Mandelos reassessed: a glimpse into the Avar pictorial evidence," in *Close to the Bone. Current Studies in Bone Technologies*, ed. S. Vitezović (Belgrade, 2016), 86–97.
- Bugarški, Ivan and Vujadin Ivanišević, "Sixth-century foederati from the Upper Moesian limes: weapons in a social context," in *Vivere militare est. From Populus*

- to Emperors—Living on the Frontier*, ed. M. Korać, vol. 1, Institute of Archaeology Monographs 68.1 (Belgrade, 2018), 291–332.
- Bühler, Birgit, “Technologische Untersuchungen an awarenzeitlichen Scheibenfibeln aus Keszthely,” *ZM* 11 (2002), 133–44.
- Bühler, Birgit, “Zur Identifizierung ‘byzantinischer’ Feinschmiedearbeiten mithilfe herstellungstechnischer Studien unter besonderer Berücksichtigung von Funden aus dem awarischen Siedlungsgebiet,” in *Byzantine Small Finds in Archaeological Contexts*, B. Böhlendorf-Arslan and A. Ricci, *Byzas* 15 (Istanbul, 2012), 105–16.
- Buinov, Iu. V. and M.A. Sergeev, “Materialy doby bronzы ta rann’ogo seredn’ovichchia z poselennia Tsyrykuny-13 na Kharkivshchyni,” *Visnyk Kharkivsk’kogo natsional’nogo universytetu im. V.N. Karazina. Istorii* 45 (2012), 8–17.
- Bukina, O.V., “Datirovka pogrebeniia riazano-okskikh mogil’nikov, soderzhashchikh ostatki trupozozhzhennii (po opublikovannym materialam Borkovskogo i Kuz’minskogo mogil’nikov),” in *Kul’tury evraziiskikh stepei vtoroi poloviny I tysiacheletii n.e. (voprosy khronologii). Materialy II Mezhdunarodnoi arkhelogicheskoi konferencii, 17–20 noiabria 1997 g.*, eds. D.A. Stashenkov, A.F. Kochkina and L.V. Kuznecova (Samara, 1998), 277–87.
- Buko, Andrzej. “Medieval rural settlements in the Central Europe (6th–mid-13th c.): examples from the Polish lands,” in *Paesaggi, comunità, villaggi medievali. Atti del Convegno internazionale di studio, Bologna, 14–16 gennaio 2010*, ed. P. Galetti, *Incontri di studio* 10 (Spoleto, 2012), 41–60.
- Bulankina, E.V., “Orudiia truda v sostave pogrebal’nogo inventar’ia riazano-okskikh mogil’nikov (po materialam kollektsii riazanskogo istoriko-arkhitekturnogo muzeia-zapovednika),” in *Drevnie remeslenniki Priural’ia. Materialy Vserossiskoi nauchnoi konferencii (Izhevsk, 21–23 noiabria 2000 g.)*, ed. V.I. Zav’ialov (Izhevsk, 2001), 120–22.
- Büntgen, Ulf, Vladimir S. Myglan, Fredrik Charpentier Ljungqvist, Michael McCormick, Nicola Di Cosmo, Michael Sigl, Johann Jungclauss, Sebastian Wagner, Paul J. Krusic, Jan Esper, Jed O. Kaplan, Michiel A.C. de Vaan, Jürg Luterbacher, Lukas Wacker, Willy Tegel and Alexander V. Kirilyanov, “Cooling and societal change during the Late Antique Little Ice Ages from 536 to around 660 AD,” *Nature Geoscience* 9 (2016), 231–36.
- Bureš, Michal and Naďa Profantová, “Raně středověké sídliště v Praze-Liboci,” in *Archeologie doby hradištní v Čechách. Sborník příspěvků z pracovního setkání badatelů zaměřených na výzkum doby hradištní v Čechách, konaného v Plzni 19.–21. 5. 2004*, ed. M. Metlička (Plzeň, 2005), 44–73.
- Burov, G.M., “Luki i dereviannye strely V–VI vv. n. e. s poseleniia Vis II v Privychegod’e,” *KSIA* 175 (1983), 55–62.
- Burov, G.M., “K izucheniiu rybolovstva na Evropeiskom Severo-Vostoке v seredine I tysiacheletii n. e.,” in *Voprosy istorii Evropeiskogo Severa. Mezhdvuzovskii sbornik*, ed. L.V. Suni (Petrozavodsk, 1984), 147–65.

- Burov, G.M., "Bronzovye kul'tovye plaketi I tys. n. e. na krainem Severo-Vostoke Evropy: pechorskii mestnyi 'zverinyi stil'," in *Problemy finno-ugorskoï arkheologii Urala i Povolzh'ia*, ed. E.A. Savel'eva (Syktyvkar, 1992), 51–59.
- Burov, G. M., "Eshche odni rekonstruirovannye sani rannego srednevekov'ia s posele-niia Vis II v Respublike Komi," in *Problemy etnogeneza finno-ugorskikh nar-odov Priural'ia. Mezhvuzovskii sbornik nauchnykh trudov*, eds. R.D. Goldina and V.A. Kananin (Izhevsk, 1992), 95–105.
- Burov, G.M., "Sani rannego srednevekov'ia s poseleniia Vis II v basseine Vychehgy," *RA*, no. 3 (1995), 184–92.
- Bushi, Skënder and Era Xhaferaj, "VIIth century African amphorae in Albania," in *L'Illyrie méridionale et l'Épire dans l'Antiquité. Actes du VI<sup>e</sup> colloque international de Tirana (20–23 mai 2015)*, eds. J.-L. Lamboley, L. Përzhita and A. Skenderaj, vol. 3, *Illyrie méridionale et l'Épire dans l'Antiquité 6* (Tirana, 2018), 907–12.
- Butėnas, Eugenijus, "Maisiejūnų pilkapyno tyrinėjimai," *LA* 15 (1998), 163–84.
- Butėnienė, Eugenija, "Lazdininkų kapinynas," in *Lietuvos archeologiniai paminklai. Lietuvos pajūrio I–VII a. kapinynai*, ed. A. Tautavičius (Vilnius, 1968), 143–61.
- Buysse, Johanna L., "The botanical remains," in *Nicopolis ad Istrum, a Late Roman and Early Byzantine City. The Finds and the Biological Remains*, ed. A.G. Poulter, Reports of the Research Committee of the Society of Antiquaries of London 67 (Oxford, 2007), 260–92.
- Bystrický, Peter, "Longobardsko-gepidské nepriateľstvo v čase Justiniánovej vojny proti Gótom," *Byzantinoslovaca* 6 (2017), 31–45.
- Calkin, Veniamin I., "Fauna iz raskopok arkheologicheskikh pamiatnikov Srednego Povolzh'ia (materialy dlia istorii skotovodstva i okhoty v SSSR)," in *Trudy Kuibyshevskoi arkheologicheskoi ekspedicii*, ed. A.P. Smirnov, vol. 2, *Materialy i issledovaniia po arkheologii SSSR* 61 (Moscow, 1958), 221–81.
- Callmer, Johan, "The beginning of the Easteuropean trade connections of Scandinavia and the Baltic regions in the 8th and 9th centuries A.D.," *WMME* 15 (1990), 19–51.
- Canarache, Vasile, *Edificiul cu mozaic din Tomis* (Constanța, 1967).
- Căpitanu, Viorel, "Tezaurul de monede bizantine descoperit la Horgești, jud. Bacău," *Carpica* 4 (1971), 253–69.
- Čaplovič, Dušan, "Najstarši Slovania na srednom Dunaji a v Karpatoch (P.J. Šafárik a L. Niederle—poznámky a autochtónnej a migračnej teórii najstaršieho slovanského osídlenia nášho územia)," *HC* 10, no. 1 (2000), 15–30.
- Carr, Christopher, "Rethinking interregional Hopewellian 'interaction,'" in *Gathering Hopewell. Society, Ritual and Ritual Interaction*, eds. C. Carr and D.T. Case (New York, 2005), 575–623.
- Carrié, Jean-Michel, "L'institution annonaire de la première à la deuxième Rome: continuité et innovation," in *Nourrir les cites de Méditerranée: antiquité—temps modernes*, eds. B. Marin and C. Virlouvet (Paris, 2007), 153–212.

- Čechová, Martina, "Fish products and their trade in Tauric Chersonesos/Byzantine Cherson. The development of a traditional craft from Antiquity to the Middle Ages," in *Detlefsen zum 100. Todestag. Ein Colloquium der Detlefsen-Gesellschaft Glückstadt*, eds. C. Boldt and K.-J. Lorenzen-Schmidt (Borsfleth, 2014), 229–36.
- Cehak-Hohubiczowa, Helena, "Cmentarzysko kurhanowe z VI i VII w. w miejsc. Karmazyny koło miasta Troki w Litewskiej SRR," *WA* 22 (1955), 312–31.
- Červinka, Inocenc Ladislav, "Germáni na Moravě. Archeologický přehled k otázce a původů deformovaných lebek v střední Evropě," *Anthropologie* 14 (1936), 107–46.
- Chaianov, Aleksandr V., *Organizaciia sievernago krest'ianskago khoziaistva* (Iaroslavl', 1918).
- Chamilaki, Katerina, "Nekrotapheio sto lopho Agrileza sto Delesi Boiotias," in *Archaiologiko ergo Thessalias kai Stereas Helladas. 2. Praktika epistemonikes synanteses Bolos 16.3–19.3.2006*, ed. A. Mazarakis-Ainian (Volos, 2009), 1167–86.
- Chamilaki, Katerina, "Taphika synola hysterioromaikon chronon apo nekrotapheio sto Delion Boiotias. Protes paratereseis," in *Keramike tes Hysteres Archaiotetas apo ton elladiko choro (30s–70s ai. m. Ch.) Epistemonike synantese, Thessalonike, 12–16 noembriou 2006*, eds. D. Papanikola-Bakirtzis and D. Kousoulakou, vol. 2 (Thessaloniki, 2010), 580–609.
- Charvát, Petr, "Le marchand franc Samo et la conquête sassanide de l'Arabie," *Studia asiatica* 2 (2001), 39–44.
- Chatziioannidis, Alexandros and Christos P. Tsamisis, "Oi limenikes apothekes tes Thessalonikes. Apo ta demosia oreia sten apotheke ton basilikon kommerkion," in *Medieval Ports in North Aegean and the Black Sea. Links to the Maritime Routes of the East. International Symposium, Thessalonike, 4–6 December 2013. Proceedings*, ed. Ph. Karagianni (Thessaloniki, 2013), 187–207.
- Chavarría-Arnau, Alexandra, "Change in scale in the Italian countryside from Late Antiquity to the early Middle Ages," in *Scale and Scale Change in the Early Middle Ages. Exploring Landscape, Local Society, and the World Beyond*, eds. J. Escalona and A. Reynolds, *The Medieval Countryside* 6 (Turnhout, 2011), 121–32.
- Chavarría-Arnau, Alexandra, "¿Castillos en el aire? Paradigmas interpretativos "de moda" en la arqueología medieval española," in *De Mahoma a Carlomagno. Los primeros tiempos (siglos VII–IX). Actas de la XXXIX Semana de Estudios Medievales de Estella. 17 al 28 de julio de 2012* (Pamplona, 2013), 131–66.
- Chebotarenko, G.F. and Nikolai P. Tel'nov, "Issledovaniia iuzhnoslavianskoi ekspedicii v 1979 g.," in *Arkheologicheskie issledovaniia v Moldavii v 1979 g.*, ed. I.A. Borziak (Kishinev, 1983), 88–102.
- Chernykh, Evgenii N., Khoferte, D.B., and Barceva, T.B., "Metallurgicheskie gruppy cvetnogo metalla I tysiacheletia n. e. iz Pribaltiki," *KSIJA* 119 (1969), 109–19.

- Chernykh, I.N., P.D. Malygin, and T.V. Tomashevich, "Issledovaniia pamiatnikov kul'tury dlinnykh kurganov v Tverskoi oblasti (pogrebal'nyi kompleks Podol I na oz. Kaftino)," *TAS* 3 (1998), 394–408.
- Chesnokova, N. N., "Evropeiskii Severo-Vostok v epokhu rannego srednevekov'ia," *AIPPZ* (1987), 91–94.
- Chevalier, Pascale and Nicolas Beaudry, "Une ville du VI<sup>e</sup> siècle retournant à la ruralité: désurbanisation et abandon du siège épiscopal de Byllis," in *L'Illyrie méridionale et l'Épire dans l'Antiquité. Actes du VI<sup>e</sup> colloque international de Tirana (20–23 mai 2015)*, eds. J.-L. Lamboley, L. Përzhita, and A. Skenderaj, Illyrie méridionale et l'Épire dans l'Antiquité 6 (Tirana, 2018), 435–48.
- Cheyette, Fredric L., "The disappearance of the ancient landscape and the Climatic Anomaly of the early Middle Ages: a question to be pursued," *Early Medieval Europe* 16, no. 2 (2008), 127–65.
- Chibilyov, Alexander, "Steppe and forest-steppe." in *The Physical Geography of Northern Eurasia*, ed. M. Shahgedanova (Oxford/New York, 2003), 248–66.
- Childe, Vere Gordon, *The Bronze Age* (Cambridge, 1930).
- Childe, Vere Gordon, *The Dawn of European Civilization*, 3rd edition (London, 1939).
- Childe, Vere Gordon, *The Prehistory of European Society* (Hammondsworth, 1958).
- Chimbuleva, I., "Rannevizantiiskie termi v Nessebre," in *Bulgaria Pontica II. Nessèbre 26–30 mai 1982*, ed. V. Giuzelev, Bulgaria Pontica Medii Aevi 2 (Sofia, 1988), 577–84.
- Chirica, Vasile and Marcel Tanasachi, *Repertoriul arheologic al județului Iași* (Iași, 1984).
- Chkhaidze, Viktor N., "Germonassa-Tomy-Tamatarkha: pozdneantichnyi i rannesrednevekovi gorod na Bospore," in *Bosporskii fenomen: problema sootnosheniia pis'mennykh i arkheologicheskikh istochnikov. Materialy mezhdunarodnoi nauchnoi konferentsii*, ed. V. Iu. Zuev (St. Petersburg, 2005), 149–53.
- Chkhaidze, Viktor N., *Fanagoriia v VI–X vekakh* (Moscow, 2012).
- Cholakov, Ivo M., "Ancient economy south of the Lower Danube limes (the territory of present-day north Bulgaria) based on finds of tools from the period of the 1st-the beginning of the 7th c. AD," in *The Lower Danube Roman Limes (1st–6th c. AD)*, eds. L. Vagalinski, N. Sharankov, and S. Torbatov (Sofia, 2012), 63–82.
- Cholakova, Anastasiia, Thilo Rehren, and Ian C. Freestone, "Compositional identification of 6th c. glass from the Lower Danube," *JAS* 7 (2016), 625–32.
- Choref, Mikhail M., "Monetnoe delo vizantiiskoi Tavriki vo vtoroi polovine VI-nachale VII vv., ili k atribucii monet s oboznacheniem nominalov M, H, K i Δ," *Prichernomor'e. Istoriiia, politika, kul'tura* 11 (2013), 126–40.
- Choref, Mikhail M., "Stanovlenie vizantiiskoi Tavriki: po dannym numizmatiki," *MAIASK* 5 (2013), 166–86.
- Choref, Mikhail M., *Istoriiia vizantiiskoi Tavriki po dannym numizmatiki* (Tiumen/Nizhnevartovsk, 2015).

- Choyke, Alice M., "Report on the Avar period antler and bone artifacts from Budakalász-Dunapart," *AAASH* 47 (1995), 221–40.
- Christou, Konstantinos P., *Byzanz und die Langobarden. Von der Ansiedlung in Pannonien bis zur endgültigen Anerkennung (500–680)* (Athens, 1991).
- Chropovský, Bohuslav, "K otázke najstaršieho slovanského osídlenia na Slovensku," *Študijné zvesti* 14 (1964), 43–56.
- Chybová, Helena, *Pravěké a slovanské osídlení Kroměřížska* (Kroměříž, 1998)
- Ciglencečki, Slavko, *Tinje nad Loko pri Žusmu. Poznoantična in zgodnjerednjeveška naselbina*, Opera Instituti Archaeologici Sloveniae 4 (Ljubljana, 2000).
- Ciglencečki, Slavko, "The changing relations between city and countryside in late antique Illyricum," *HAM* 20, no. 1 (2014), 232–50.
- Ciesielski, Mirosław, Bartłomiej Gruszka, and Anna Łuczak, "Sozioökonomische und geografische Bedingungen der Entwicklung der frühmittelalterlichen Besiedlung (6.–11. Jahrhundert) im Tal der mittleren Oder," in *Die frühen Slawen—von der Expansion zu gentes und nationes. Beiträge der Sektion zur slawischen Frühgeschichte des 8. Deutschen Archäologiekongresses in Berlin, 06.10. Oktober 2014. 1. Beiträge zum Schwerpunktthema*, F. Biermann, Th. Kersting, and A. Klammt, Beiträge zur Ur- und Frühgeschichte Mitteleuropas 81.2 (Langenweissbach, 2016), 109–36.
- Ciglis, Jānis, "Some notes on the chronology of Latgallian and Selonian artefacts in the Middle Iron Age," *AL* 2 (2001), 48–64.
- Čilinská, Zlata, "Zur Frage des Samo-Reiches," in *Rapports du III-e Congrès international d'archéologie slave. Bratislava, 7–14 septembre 1975*, ed. B. Chropovský, vol. 2 (Bratislava, 1980), 79–86.
- Čilinská, Zlata, "Das Kunsthandwerk im 7.–8. Jahrhundert in der Südwestslowakei," in *Zbornik posveten na Boshko Babich. Mélange Boško Babič 1924–1984*, ed. M. Apostolski (Prilep, 1986), 279–83.
- Čilinská, Zlata, "Postavenie žien v avarskom kaganáte," in *K problematike osídlenia stredodunajskej oblasti vo včasnóm stredoveku*, ed. Z. Čilinská (Nitra, 1991), pp. 9–38.
- Ciołek, Renata, "Skarb złotych monet z Mrzezina (Gm. Puck) a zespół z Brzezina Gdańskiego," *WN* 42 (1998), 59–67.
- Ciołek, Renata, "Znaleziska monet rzymskich z terenów Pomorza przechowywane w zbiorach Muzeum Kulturalno-Historycznego w Stralsundzie," *WN* 43 (1999), 169–86.
- Ciołek, Renata, "Solidusfunde in den südlichen Ostseegebieten," in *XIII Congreso Internacional de Numismática, Madrid, 2003. Actas*, eds. C. Alfaro Asíns, C. Marcos and P. Otero, vol. 2 (Madrid, 2005), 1095–104.
- Cipot, Dašenka, "Zgodnjerednjeveški jami iz Popave I pri Lipovcih," in *Srednji vek. Arheološki raziskave med Jadranskim morjem in Panonsko nižino*, ed. M. Guštin (Ljubljana, 2008), 59–63.
- Cipot, Dašenka, "Prva faza slovanske poselitve iz Popave I pri Lipovcih," *Zbornik Soboškega muzeja* 15 (2010), 245–59.

- Cirelli, Enrico, "Phoinike fra tarda Antichità e Medioevo: considerazioni sulla base della cultura materiale," in *Phoinike VI. Rapporto preliminare sulla campagne di scavi e ricerche 2011–2014*, eds. S. De Maria and S. Gjongecaj (Bologna, 2015), 105–14.
- Cîrjan, Constantin, "Un mormînt creștin descoperit la Tomis," *Pontica* 3 (1970), 383–89.
- Cirkin, A.V., "Shokshinskii mogil'nik," *SA*, no. 1 (1972), 155–70.
- Ciupercă, Bogdan, "Teritoriul nord-dunărean în strategia economică și politică a imperiului romano-bizantin în secolul al VI-lea p. Chr.," *AMIAF* 3–4 (2007–2008), 125–40.
- Ciupercă, Bogdan, "Câteva puncte de vedere privind activitățile meșteșugărești și spațiile de 'producție' între Carpați și Dunăre în secolele VIII–X," *BMJT* 3 (2011), 223–32.
- Ciupercă, Bogdan and Andrei Măgureanu, "Unele observații asupra problemei tiparelor de lut din secolele V–VII descoperite în spațiul extra-carpatic," *BMJT* 1 (2009), 149–57.
- Ciupercă, Bogdan and Andrei Măgureanu, "Locuințe din a doua jumătate a mileniului I p. Chr. descoperite la Târgșoru Vechi," in *Arheologia mileniului I p. Chr. Cercetări actuale privind istoria și arheologia migrațiilor*, ed. L.M. Voicu (Bucharest, 2010), 152–74.
- Clark, John E., "Craft specialization as an archaeological category," *REA* 16 (1995), 267–94.
- Clark, John E. and William J. Parry, "Craft specialization and cultural complexity," *REA* 12 (1990), 289–346.
- Clewing, Konrad and Oliver Jens Schmitt (eds.), *Geschichte Südosteuropas. Vom frühen Mittelalter bis zur Gegenwart* (Regensburg, 2011).
- Cnotliwy, Eugeniusz, "Grzebień w kulturze wczesnosłowiańskiej na terenie południowej i środkowej Polski," in *Kraje słowiańskie w wiekach średnich: profanum i sacrum*, eds. H. Kóčka-Krenz and W. Łosiński (Poznań, 1998), 366–79.
- Collier, George Allan, *Fields of the Tzotzil. The Ecological Bases of Tradition in Highland Chiapas* (Austin, 1975).
- Comșa, Maria, "Cu privire la caracterul organizării social-economice și politice de pe teritoriul țării noastre în epoca migrațiilor," *SCIV* 18, no. 3 (1967), 431–42.
- Comșa, Maria, "Contribution à la question de la pénétration des Slaves au sud du Danube durant les VI<sup>e</sup>–VII<sup>e</sup> siècles d'après quelques données archéologiques de Dobroudja," in *I. Międzynarodowy kongres archeologii słowiańskiej. Warszawa 14–18 IX 1965*, ed. W. Hensel, vol. 3 (Wrocław/Warsaw/Cracow, 1970), 322–30.
- Comșa, Maria, "Sur le caractère de l'organisation sociale-économique et politique sur le territoire de la Roumanie durant la période de passage la féodalité," in *Nouvelles études d'histoire*, vol. 4 (Bucharest, 1970), 31–46.
- Comșa, Maria, "Socio-economic organisation of the Dacoromanic and Slav population on the Lower Danube during the 6th and 7th centuries," in *Relations Between*



- the Autochthonous Population and the Migratory Populations on the Territory of Romania*, eds. M. Constantinescu, Ș. Pascu, and P. Diaconu, *Bibliotheca Historica Romaniae* 16 (Bucharest, 1975), 171–200.
- Comșa, Maria, *Cultura materială veche românească (Așezările din secolele VIII–X de la Bucov-Ploiești)*, Biblioteca de arheologie 33 (Bucharest, 1978).
- Comșa, Maria, “Les formations politiques (cnézats de la vallée) du VI<sup>e</sup> siècle sur le territoire de la Roumanie,” *Prace i materiały Muzeum Archeologicznego i Etnograficznego w Łódźi* 25 (1978), 109–17.
- Comșa, Maria, “Cuptoare de ars oale din secolele VI–VII descoperite la Radovanu-Ilfov,” in *Studii și comunicări de istorie a civilizației populare din România*, eds. C. Irimie, C. Bucur, C. Gangolea, and H. Rușdea (Sibiu, 1981), 241–48.
- Comșa, Maria, “Considérations relatives à la communauté villageoise en territoire roumain aux VI–VII-e siècles,” in *Actes du XII-e Congrès international des sciences préhistoriques et protohistoriques, Bratislava, 1–7 septembre 1991*, J. Pavuj, vol. 4 (Bratislava, 1993), 15–17.
- Comșa, Maria, “Structuri socio-economice din secolele VI–X pe teritoriul României,” *Carpica* 26, no. 1 (1997), 195–203.
- Comșa, Maria, “La province de la Scythie Mineure (Dobroudja) et les Slaves pendant les VI–VII ss.,” in *Istoriia i kul'tura drevnikh i srednevekovykh slavian*, ed. V.V. Sedov, *Trudy VI Mezhdunarodnogo Kongressa Slavianskoi Arkheologii* 5 (Moscow, 1999), 301–13.
- Condurachi, Emil, “Șantierul arheologic Histria,” *MCA* 4 (1957), 9–101.
- Constantiniu, Margareta, “Săpăturile de la Bucureștii Noi 1960,” *CAB* 1 (1963), 77–104.
- Constantiniu, Margareta, “Șantierul arheologic Băneasa-Străulești,” *CAB* 2 (1965a), 75–98.
- Constantiniu, Margareta, “Săpăturile de la Străulești-Măicănești. Așezarea feudală II,” *CAB* 2 (1965b), 174–89.
- Constantiniu, Margareta, “Elemente romano-bizantine în cultura materială a populației autohtone din partea centrală a Munteniei în secolele VI–VII,” *SCIV* 17, no. 4 (1966), 665–78.
- Constantinov, Valentin Alexei, “Ioan din Efes și realitățile istorice din Peninsula Balcanică în secolul al VI-lea,” *Mousaios* 6 (2001), 75–87.
- Corman, Igor, “Săpăturile arheologice de la Vânători-Neamț,” *AM* 17 (1994), 301–08.
- Cossentino, Salvatore, “Dalla tassazione tardoromana a quella bizantina. Un avvio al medioevo,” in *Gunnar Mickwitz nella storiografia europea tra le due guerre. Atti del colloquio all'Institutum Romanum Finlandiae, 6–7 giugno 2005*, ed. M. Kajava, *Acta Instituti Romani Finlandiae* 34 (Rome, 2007), 119–33.
- Costin, Cathy Lynne, “Craft specialization: issues in defining, documenting, and explaining the organization of production,” *Archaeological Method and Theory* 3 (1991), 1–56.

- Costin, Cathy Lynne, "Concepts of property and access to nonagricultural resources in the Inka Empire," in *Property in Economic Context*, eds. R.C. Hunt and A. Gilman (Lanham/New York/Oxford, 1998), 119–38.
- Costin, Cathy Lynne, "Craft production systems," in *Archaeology at the Millennium. A Sourcebook*, eds. G.M. Feinman and T.D. Price (New York/Boston, 2001), 273–327.
- Craddock, Paul, Michael Cowell, Duncan Hook, Michael Hughes, Susan La Niece, and Nigel Meeks, "Change and stasis: the technology of Dark Age metalwork from the Carpathian Basin," *British Museum Technical Research Bulletin* 4 (2010), 55–65.
- Crow, James, "Perspectives on the archaeology of Byzantine Greece, 600–1000 AD," *Pharos* 20, no. 1 (2014), 291–311.
- Csallány, Dezső, *A kunszentmártoni avarkori ötvössír* (Szeged, 1933).
- Csallány, Dezső, "Kora-avarkori sírleletek," *FA* 1–2 (1939), 121–80.
- Csallány, Dezső, *Archäologische Denkmäler der Gepiden im Mitteldonaubecken*, *Archaeologia Hungarica* 38 (Budapest, 1961).
- Csallány, Gábor, "A szentes-derékegyházi népvándorláskori sírlelet," *FA* 1–2 (1939), 116–20.
- Csalog, József, "Rangjelző díszkard az avaroknál," *FA* 11 (1959), 105–08.
- Cseh, János, "Gepida csontmegmunkáló műhely és szövőház Tiszafüreden," *ML* 53–54 (1986), 3–19.
- Cseh, János, "Megjegyzések egy Tisza-menti gepida településről," *ML* 55–56 (1987), pp. 3–27.
- Cseh, János, "Kelta, szarmata, gepida és avar település nyomai egy nagykunsági lelőhelyen (Kuncsorba-XIV. dűlő)," *JAME* 30–32 (1987–1989), 145–60.
- Cseh, János, "Megjegyzések egy Tisza-menti gepida településről," *ML* 55–56 (1988), 3–27.
- Cseh, János, "Egy gepida harcos fegyverzete a Közép-Tisza vidékről. Hely Európa kora Meroving-kori emlékanyagában," *Jászkunság* 35, no. 5 (1989), 71–78.
- Cseh, János, "Gepida fazekaskemence Törökszentmiklóson," *AE* 117 (1990), 223–40.
- Cseh, János, "Kora-népvándorlás kor (gepida) telep," in *Régészeti ásatások Tiszafüred-Morotvaparton*, eds. L. Tóth and L. Madaras, Szolnok Megyei Múzeumi Adattár 32 (Szolnok, 1991), 157–225.
- Cseh, János, "Díszkerámia a gepida királyság korából (Régészeti leletek Kengyel környékéről)," *ML* 71–72 (1993), 5–15.
- Cseh, János, "Kora népvándorlás kori teleprészlet a Tiszazugban," *AE* 121–122 (1994–1995), 115–29.
- Cseh, János, "Gepida település Rákóczi-falva határában," *CAH* (1997), 173–94.
- Cseh, János, "Kutatások gepida települések régészeti nyomai után Kengyel területén (1990–1995)," in *A gepidák. Kora középkori germán királyság az Alföldön*, ed. P.G. Havassy, Gyulai katalógusok 7 (Gyula, 1999a), 61–75.

- Cseh, János, "Régészeti adalékok egy Zagyva-Parti gepida településről," in *A gepidák. Kora középkori germán királyság az Alföldön*, ed. P.G. Havassy, Gyulai katalógusok 7 (Gyula, 1999b), 39–57.
- Cseh, János, "Üvegleletek a 4.–6. századból Kengyel környéki településeken (Kutatástörténeti áttekintés)," *Tisicum* 11 (1999c), 25–29.
- Cseh, János, "Gepida-ház szövőszék helyével Szolnok-Zagyva-partról (A szerkezet nyomai az 5–6. századi Kelet-Kárpát-medencében)," *Jászági könyvtár* 4 (2000), 91–111.
- Cseh, János, "Kengyel-Baghymajor-Kengyelpart II. A gepidák Meroving-kori anyagi kultúrája kezdeteinek kutatásához," *Tisicum* 14 (2004a), 49–69.
- Cseh, János, "Szelevény-Sweiger tanya. Egy VI. századi gepida település a Tiszazugban," *Tisicum* 14 (2004b), 71–165.
- Cseh, János, Eszter Istvánovits, Emese Lovász, Károly Mesterházy, Margit Nagy, Ibolya M. Nepper and Erika Simonyi, *Gepidische Gräberfelder im Theissgebiet II*, Monumenta Germanorum Archaeologica Hungariae 2 (Budapest, 2005).
- Csiky, Gergely, "Armament and society in the mirror of the Avar archaeology. The Transdanubia-phenomenon revisited," in *Proceedings of the 1st International Conference Interethnic Relations in Transylvania. Militaria Mediaevalia in Central and South Eastern Europe, Sibiu, October 14th–17th, 2010*, ed. I.M. Țiplic (Sibiu, 2011), 9–34.
- Csiky, Gergely, *Avar-age Polearms and Edged Weapons. Classification, Typology, Chronology, and Technology*, East Central and Eastern Europe in the Middle Ages, 450–1450 32 (Leiden/Boston, 2015a).
- Csiky, Gergely, "Sinope in the early medieval economy of the Black Sea region (questions and problems)," *Antaeus* 33 (2015b), 315–45.
- Csiky, Gergely, "A sztyeppei nomádok hitvilága," in *Szent Márton és Pannónia. Kereszténység a római világ határán*, eds. E. Tóth, T. Vida and I. Takács (Pannonhalma/Szombathely, 2016), 152–60.
- Csiky, Gergely and Piroska Magyar-Hársegyi, "Wine for the Avar elite? Amphorae from Avar period burials in the Carpathian Basin," in *The Danubian Lands Between the Black, Aegean, and Adriatic Seas (7th Century BC–10th Century AD). Proceedings of the Fifth International Congress on Black Sea Antiquities (Belgrade, 17–21 September 2013)*, eds. G.R. Tsetskhladze, A. Avram, and J. Hargrave (Oxford, 2015), 175–82.
- Čuláková, Katarína, "Raně středověké osídlení na k. ú. Obríství," *Praehistorica* 31 (2014), 153–92.
- Cunjak, Mlađan, "Prilog prouchvanju prisustva gepida u Podunavlju," *GSAD* 8 (1992), 34–40.
- Curta, Florin, "On the dating of the 'Vețel-Coșoveni' group of curved fibulae," *EN* 4 (1994), 233–65.
- Curta, Florin, "The changing image of the Early Slavs in the Rumanian historiography and archaeological literature. A critical survey," *Südost-Forschungen* 53 (1994), 225–310.

- Curta, Florin, "Invasion or inflation? Sixth- to seventh-century Byzantine coin hoards in Eastern and Southeastern Europe," *Annali dell'Istituto Italiano di Numismatica* 43 (1996), 65–224.
- Curta, Florin, "Slavs in Fredegar and Paul the Deacon: medieval 'gens' or 'scourge of God'?" *Early Medieval Europe* 6, no. 2 (1997), 141–67.
- Curta, Florin, "Feasting with 'kings' in an ancient democracy: on the Slavic society of the Early Middle Ages (sixth to seventh century A.D.)," *Essays in Medieval Studies* 15 (1999), 19–34.
- Curta, Florin, "Peasants as 'makeshift soldiers for the occasion': sixth-century settlement patterns in the Balkans," in *Urban Centers and Rural Contexts in Late Antiquity*, eds. T.S. Burns and J.W. Eadie (East Lansing, 2001a), 199–217.
- Curta, Florin, "Pots, Slavs, and 'imagined communities': Slavic archaeology and the history of the early Slavs," *European Journal of Archaeology* 4, no. 3 (2001b), 367–84.
- Curta, Florin, *The Making of the Slavs. History and Archaeology of the Lower Danube Region, c. 500–700* (Cambridge/New York, 2001c).
- Curta, Florin, "Quaestura exercitus: the evidence of lead seals," *Acta Byzantina Fennica* 1 (2002), 9–26.
- Curta, Florin, "L'administration byzantine dans les Balkans pendant la "grande brèche": le témoignage des sceaux," *Bizantinistica. Rivista di studi bizantini e slavi* 6 (2004), 155–90.
- Curta, Florin, "Byzantium in Dark-Age Greece (the numismatic evidence in its Balkan context)," *BMGS* 29 (2005a), 113–46.
- Curta, Florin, "Female dress and 'Slavic' bow fibulae in Greece," *Hesperia* 74, no. 1 (2005b), 101–46.
- Curta, Florin, "Introduction," in *East Central and Eastern Europe in the Early Middle Ages*, ed. F. Curta (Ann Arbor, 2005c), 1–38.
- Curta, Florin, "Merovingian and Carolingian gift giving," *Speculum* 81 (2006a), 671–99.
- Curta, Florin, "Qagan, khan or king? Power in early medieval Bulgaria (seventh to ninth century)," *Viator* 37 (2006b), 1–31.
- Curta, Florin, *Southeastern Europe in the Middle Ages, 500–1250* (Cambridge/New York, 2006c).
- Curta, Florin, "The Amber Trail in early medieval Eastern Europe," in *Paradigms and Methods in Early Medieval Studies*, eds. F. Lifshitz and C. Chazelle (New York, 2007), 61–79.
- Curta, Florin, "Arkheologiia identichnostei v Vostochnoi Evrope (VI-pervaia polovina VII v.)," *SSBP* 6, no. 2 (2008a), 133–54.
- Curta, Florin, "The north-western region of the Black Sea during the 6th and early 7th century AD," *Ancient West & East* 7 (2008b), 149–85.
- Curta, Florin, "The earliest Avar-age stirrups, or the 'stirrup controversy' revisited," in *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars, and Cumans*, ed. F. Curta (Leiden/Boston, 2008c), 297–326.

- Curta, Florin, "The archaeology of early medieval service settlements in Eastern Europe," in *Central and Eastern Europe in the Middle Ages. A Cultural History*, eds. P. Górecki and N. van Deusen, International Library of Historical Studies 51 (London/New York, 2009), 30–41 and 221–27.
- Curta, Florin, "New remarks on early medieval hoards of iron implements and weapons," in *Frühgeschichtliche Zentralorte in Mitteleuropa. Internationale Konferenz und Kolleg der Alexander von Humboldt-Stiftung zum 50. Jahrestag des Beginns archäologischer Ausgrabungen in Pohansko bei Břeclav, 5.–9.10.2009, Břeclav, Tschechische Republik*, eds. J. Macháček and Š. Ungerman, Studien zur Archäologie Europas 14 (Bonn, 2011a), 251–76.
- Curta, Florin, "Sklaviniai and ethnic adjectives: a clarification," *Byzantion Nea Hellás* 30 (2011b), 85–98.
- Curta, Florin, *The Edinburgh History of the Greeks, c. 500 to 1050. The Early Middle Ages* (Edinburgh, 2011c).
- Curta, Florin, "Werner's class I C: erratum corrigendum cum commentariis," *EN* 21 (2011d), 63–110.
- Curta, Florin, "'Slavic' bow fibulae: twenty years of research," *BRGK* 93 (2012), 235–342.
- Curta, Florin, "Horsemen in forts or peasants in villages? Remarks on the archaeology of warfare in the 6th to 7th c. Balkans," in *War and Warfare in Late Antiquity*, eds. A. Sarantis and N. Christie, Late Antique Archaeology 8 (Leiden/Boston, 2013a), 809–52.
- Curta, Florin, "Seventh-century fibulae with bent stem in the Balkans" *AB* 17, no. 1 (2013b), 49–70.
- Curta, Florin, "The beginning of the Middle Ages in the Balkans," *Millennium* 10 (2013c), 145–214.
- Curta, Florin, "Coins and burials in Dark-Age Greece. Archaeological remarks on the Byzantine 'Reconquista,'" in *Srednovjekovniat chovek i negoviät sviat. Sbornik v chest na 70-ta godishnina na prof. d. i. n. Kazimir Popkonstantinov*, ed. R. Kostova (Veliko Tărnovo, 2014), 55–101.
- Curta, Florin, "East Central Europe: the gate to Byzantium," *BZ* 108, no. 2 (2015), 1–42.
- Curta, Florin, "Amphorae and seals: the 'sub-Byzantine' Avars and the *quaestura exercitus*," in *Zwischen Byzanz und der Steppe. Archäologische und historische Studien. Festschrift für Csanád Bálint zum 70. Geburtstag*, eds. Á. Bollók, G. Csiky, and T. Vida (Budapest, 2016a), 307–34.
- Curta, Florin, "Avar *Blitzkrieg*, Slavic and Bulgar raiders, and Roman special ops: mobile warriors in the sixth-century Balkans," in *Central Eurasia in the Middle Ages. Studies in Honour of Peter B. Golden*, eds. I. Zimonyi and O. Karatay, Turcologica 104 (Wiesbaden: Harrassowitz Verlag, 2016b), 69–90.

- Curta, Florin, "Burial in early medieval Greece: on ethnicity in Byzantine archaeology," in *Prof d-r Boris Borisov uchenici i priiateli*, ed. B. Borisov (Veliko Tărnovo, 2016c), 419–48.
- Curta, Florin, "Burials in prehistoric mounds. Reconnecting with the past in early medieval Greece," *Revue des études byzantines* 74 (2016d), 269–85.
- Curta, Florin, "Postcards from Maurilia, or the historiography of the Dark-Age cities of Byzantium," *Post-classical Archaeologies* 6 (2016e), 89–110.
- Curta, Florin, "Shedding light on a murky matter: remarks on 6th to early 7th century clay lamps in the Balkans," *AB* 20, no. 3 (2016f), 51–116.
- Curta, Florin, "Coins, forts and commercial exchanges in the sixth- and early seventh-century Balkans," *Oxford Journal of Archaeology* 36, no. 4 (2017a), 439–54.
- Curta, Florin, "Social identity on the platter. Clay pans in sixth to seventh century ceramic assemblages," in *Entangled Identities and Otherness in Late Antique and Early Medieval Europe*, eds. J. López Quiroga, M. Kazanski, and V. Ivanišević, BAR International Series 2852 (Oxford, 2017b), 132–77.
- Curta, Florin, "The earliest Slavs in East Central Europe? Remarks on the early medieval settlement in Nova Tabla (Slovenia)," in *Studia Romana et mediaevalia Europaensia. Miscellanea in honorem annos LXXXV peragentis professoris emeriti Dan Gh. Teodor oblata*, eds. D. Aparaschivei and G. Bilavschi (Bucharest/Brăila, 2018), 81–98.
- Curta, Florin, *Eastern Europe in the Middle Ages (500–1300)*, Brill's Companions in European History 19 (Leiden/Boston, 2019).
- Curta, Florin and Vasile I. Dupoi, "Über die Bügelfibel aus Pietroasele und ihre Verwandten," *Dacia* 38–39 (1994–1995), 217–38.
- Curta, Florin and Andrei Gândilă, "Hoards and hoarding patterns in the early Byzantine Balkans," *DOP* 65–66 (2011–2012), 45–112.
- Curta, Florin and Andrei Gândilă, "Too much typology, too little history: a critical approach to the classification and interpretation of cast fibulae with bent stem," *AB* 15, no. 3 (2011), 51–81.
- Curta, Florin and Bartłomiej Szymon Szmoniewski, *The Velestino Hoard. Casting Light on the Byzantine "Dark Ages"* (New York, 2019).
- Custurea, Gabriel and Gabriel Talmațchi, "Regarding the fall of the Danubian *limes* with special reference to Scythia Minor in the 7th century," in *The Danubian Lands Between the Black, Aegean, and Adriatic Seas (7th Century BC–10th Century AD). Proceedings of the Fifth International Congress on Black Sea Antiquities (Belgrade, 17–21 September 2013)*, eds. G.R. Tsetsckhladze, A. Avram and J. Hargrave (Oxford, 2015), 277–82.
- Cygan, Sylwia, *Wczesnostowiańskie półziemianki kwadratowe na terenie Polski, Czech, Słowacji, wschodnich Niemiec i Dolnej Austrii*, Collectio Archaeologica Ressoiviensis 3 (Rzeszów, 2006).

- Czeczuga, Bazyli and Wiesława Kossacka, "Szczatki roślinne z osady jaćwieskiej (II–VI w.n.e.) w miejscowości Osinki pow. Suwałki," *RoB* 7 (1966), 153–62.
- Czeczuga, Bazyli and Wiesława Kossacka, "Nasiona zbóż i chwastów z grodziska w Pasymiu-Ostrowiu w powiecie szczecińskim z VI–VIII wieku naszej ery," *Rocznik Olsztyński* 11 (1974), 235–42.
- Czeczuga, Bazyli, Wiesława Kossacka, and Edward Kłyszeyko, "Szczatki roślinne z badań grodziska w Haćkach koło Bielska Podlaskiego (VI, XI–XII w.)," *RoB* 13 (1976), 493–500.
- Czeglédy, Károly, "Pseudo-Zacharias Rhetor on the nomads," in *Studia turcica*, ed. L. Ligeti, Bibliotheca Orientalis Hungarica 17 (Budapest, 1971), 133–48.
- Czopek, Sylwester, Lesław Morawiecki, and Joanna Podgórska-Czopek. "Znalezisko monety bizantyjskiej ze stanowiska nr. 22 w Grodzisku Dolnym, pow. Leżajsk," *SArch* 53 (2001), 391–402.
- Dąbrowska, Elżbieta, "Skarb ozdób brązowych z VI–VII w. na stanowisku 62A w Nowej Hucie-Mogile," *APol* 29 (1984), 351–69.
- Dąbrowski, Edward, "Stan i potrzeby badań nad wczesnym średniowieczem w woj. Zielonogorskim," in *Stan i potrzeby badań nad wczesnym średniowieczem w Polsce. Materiały z konferencji Poznań 14–16 grudnia 1987 roku*, ed. Z. Kurnatowska (Poznań, 1990), 165–72.
- Dąbrowski, Edward, "Refleksje nad wczesnym średniowieczem w Zielonogórskim," *Rocznik Lubuski* 24, no. 1 (1998), 83–96.
- Dąbrowski, Krzysztof, "Burial of horses with richly ornamented bridles, from burial site at Tumiany near Olsztyn, Poland," in *Actes du VIII-e Congrès international des sciences préhistoriques et protohistoriques, Beograd 9–15 septembre 1971*, ed. G. Novak, vol. 3 (Belgrade, 1973), 354–59.
- Dąbrowski, Krzysztof, "Archäologische Untersuchungen in Tumiany, Kr. Olsztyn," *ZfA* 9 (1975), 265–79.
- Dąbrowski, Krzysztof, "Nouvelles données concernant l'orfèvrerie sur le territoire de la voïvodie d'Olsztyn (Pologne)," *ArchPol* 19 (1980), 235–41.
- Dagron, Gilbert, "'Ceux d'en face'. Les peuples étrangers dans les traités militaires byzantins," *T&M* 10 (1987), 207–32.
- Daiga, J., "Krāsaino metālu ķīmiskais sastāvs Latvijā 6.–13. gs.," *Arheoloģija un etnogrāfija* 4 (1962), 47–65.
- Daim, Falko, "Holz-, Knochen- und Geweihverarbeitung," in *Reitervölker aus dem Osten. Hunnen + Awaren. Burgenländische Landesausstellung 1996. Schloß Halbturn, 26. April–31. Oktober 1996*, eds. F. Daim, K. Kaus, and P. Tomka (Eisenstadt, 1996), 358–61.
- Daim, Falko, "Vom Umgang mit toten Awaren. Bestattungsgebräuche im historischen Kontext," in *Erinnerungskultur im Bestattungsritual. Archäologisch-historisches Forum*, eds. J. Jarnut, M. Wemhoff and A. Nusser, *MittelalterStudien* 3 (Munich, 2003), 41–60.

- Daim, Falko, "Die Steppe und Byzanz. Kunsthandwerk und Bilderwelten im Awarenkaganat," in *400–1000. Vom spätantiken Erbe zu den Anfängen der Romanik*, eds. Ch. Lübke and M. Hardt, *Handbuch zur Geschichte der Kunst in Ostmitteleuropa 1* (Berlin/Munich, 2017a), 138–53.
- Daim, Falko, "The gold of the Avars. Three case studies," in *Dalle steppe al Mediterraneo. Popoli, culture, integrazione. Atti del Convegno internazionale di studi "Fondazioni e rituali funerari delle aristocrazie germaniche nel contesto mediterraneo"*, *Cimitile-Santa Maria Capua Vetere, 18–19 giugno 2015. Atti del Convegno internazionale di studi "Oriente e Occidente fra tarda antichità e medioevo popoli e culture dalle steppe al Mediterraneo"*, *Cimitile-Santa Maria Capua Vetere, 16–17 giugno 2016*, eds. C. Ebenista and M. Rotili, *Giornate sulla tarda antichità e il Medioevo 8* (Naples, 2017b), 407–22.
- Daim, Falko, Mathias Mehofer, and Bendegúz Tóbiás, "Die langobardischen Schmiedegräber aus Poysdorf und Brno. Fragen, Methoden, erste Ergebnisse," in *Die Langobarden. Herrschaft und Identität*, eds. W. Pohl and P. Erhard, *Forschungen zur Geschichte des Mittelalters 9* (Vienna, 2005), 201–24.
- Dakanis, Bronius, "Mažai žinomi V–XII a. rytų Lietuvos pilkapijai," *Muziejai ir paminklai 8* (1987), 57–68.
- Damjanović, Ljiljana, Vesna Bikić, Kristina Šarić, Suzana Erić and Ivanka Holclajtner-Antunović, "Characterization of the early Byzantine pottery from Caričin Grad (South Serbia) in terms of composition and firing temperature," *JAS 46* (2014), 156–72.
- Dancheva-Vasileva, Ani, *Plovdiv prez srednovekovieto (IV–XIV vek)* (Sofia, 2009).
- Dănilă, Nicolae, "Tipare de turnat cruci din secolele IV–VI, descoperite pe teritoriul României," *Biserica Ortodoxă Română* 101, nos. 7–8 (1983), 557–61.
- Dănilă, Nicolae, "Noi contribuții la repertoriul materialelor arheologice paleocreștine din Muntenia," *Glasul Bisericii 45*, no. 2 (1986), 102–04.
- Darmangeat, Christophe, "Don, échange et autres transferts: formes simples, hybrides et composées," *L'homme 217* (2016), 21–43.
- Daskalov, Metodi, "Kalăpi za metalni nakiti i kolanni ukrasi (VI–VII v.) ot Iuzhna Bălgariia," *Arkheologija 45*, nos. 1–2 (2004), 91–5.
- Daskalov, Metodi, *Kolani i kolanni ukrasi ot VI–VII vek (ot dнешna Bălgariia i săsednite zemi)* (Sofia, 2012).
- Daskalov, Metodi and Dimităr Il. Dimitrov, "Ein Paar anthropozoomorphe Bügelfibeln (des sog. Dnjeprtyps) aus Südbulgarien," *AB 3*, no. 3 (1999), 75–80.
- Daskalov, Metodi and Dimităr Il. Dimitrov, "Za proizvodstvoto na nakiti prez VI–VII v. v bălgarskite zemi," *Arkheologija 42*, nos. 3–4 (2001), 69–74.
- Daskalov, Metodi and Katia Trendafilova, "Mogil'nik epokhi pereseleniia narodov u s. Kosharevo (oblast' Pernik), zapadnaia Bălgariia (predvaritel'noe soobshchenie)," *RA*, no. 1 (2003), 145–52.



- Daugudis, Vytautas, "Arkheologicheskie raskopki poseleniia u mestechka Lavarishkes (Vil'niusskii raion) v 1965 g.," in *Materialy k otchetnoi konferencii arkheologicheskikh i etnograficheskikh ekspeditsii 1964–1965 gg. Instituta Istorii AN Litovskoi SSR, Vil'nius, 17–18 marta 1966 g.*, eds. A. Vyšniauskaitė and A. Tautavičius (Vilnius, 1966), 7–8.
- Daugudis, Vytautas, "Gorodishcha Litvy V–VIII vv.," *AIPPZ* (1989), 61–63.
- Davidson, Gladys R., "The Avar invasion of Corinth," *Hesperia* 6 (1937), 227–39.
- Davidson, Gladys Weinberg, "A wandering soldier's grave in Corinth," *Hesperia* 43 (1974), 512–21.
- Davis, Jennifer D., and Michael McCormick, "The early Middle Ages: Europe's long morning," in *The Long Morning of Medieval Europe. New Directions in Early Medieval Studies*, eds. J.R. Davis and M. McCormick (Aldershot/Burlington, 2008), 1–10.
- Decker, Michael, *Tilling the Hatful Earth. Agricultural Production and Trade in the Late Antique East* (Oxford, 2009).
- Decker, Michael. *The Byzantine Dark Ages* (London, 2016).
- Deemant, Kaupo, "Über die Ausgrabungen des Steingraberfeldes von Proosa," *ENSV* 27, no. 1 (1978), 81–83.
- Degrand, A., *Souvenirs de la Haute-Albanie* (Paris, 1901).
- Dejan, Monica. *Elemente răsăritene în ținuturile extracarpatice (secolele VI–X)* (Suceava, 2015).
- Deligiannakis, Georgios, *The Dodecanese and the Eastern Aegean Islands in Late Antiquity, AD 300–700* (Oxford, 2016).
- Demo, Željko, "Novac germanskih vladara druge pol. 5. do u drugu pol. 6. st. u Numizmatičkoj zbirci Arheološkog Muzeja u Zagrebu," *AV* 32 (1981), 454–81.
- Derevianko, A.P. and Iaroslav V. Volodarets'-Urbanovych, "Zakhovannia skarbiv skhidnoevropeys'kykh vyimchastykh emalei ta typu 'Martynivky': paraleli," in *Evropeys'ka arkheologiiia I tysiacholittia n. e. Zbirnyk naukovykh prats' na chest' Liiany Vasylivny Vakulenko*, eds. A.V. Skyba and S.A. Gorbanenko (Kiev, 2017), 35–50.
- Dergachev, Valentin A., O.V. Larina, and Gheorghe Postică, "Raskopki 1980 g. na mnogolosoinom poselenii Dancheny I," in *Arkheologicheskie issledovaniia v Moldavii v 1979–1980 gg.*, ed. I.A. Borziak (Kishinew, 1983), 112–36.
- D'iachenko, A.G., "Tekhnologiia izgotovleniia predmetov na Cepliaevskogo klada ranneslavianskogo vremeni," in *Ispol'zovanie metodov estestvennyi nauk v arkheologii*, ed. V.F. Gening (Kiev, 1978), 27–35.
- D'iachenko, A.G., Oleg M. Prykhodniuk, and E.N. Petrenko, "Kompleksy I tys. n.e. selishcha Zanki (po raskopkam 1976 g.)," in *Arkheologiia slavianskogo iugo-vostoka*, ed. A.G. D'iachenko (Voronezh, 1991), 26–33.
- Diaconu, Petre, "Observații asupra ceramicii din secolele XII–XIII de pe teritoriul orașului București," *SCIV* 9, no. 2 (1958), 451–59.

- Díaz, Pablo C. and Iñaki Martín Viso, "Introduction," in *Between Taxation and Rent. Fiscal Problems from Late Antiquity to Early Middle Ages*, eds. P.C. Díaz and I.M. Viso, Munera 32 (Bari, 2011), pp. 6–21.
- Diculescu, Constantin, *Die Gepiden. Forschungen zur Geschichte Daziens im frühen Mittelalter und zur Vorgeschichte des rumänischen Volkes* (Leipzig, 1923).
- Diller, Aubrey, *The Tradition of Minor Greek Geographers*, Philological Monographs 14 (New York, 1952).
- Dillian, Carolyn D., and Carolyn L. White, "Introduction: perspectives on trade and exchange," in *Trade and Exchange. Archaeological Studies from History and Prehistory*, eds. C.D. Dillian and C.L. White (New York, 2010), 3–14.
- Dimitrijević, Danica, "Gepidska nekropola 'Kormadin' kod Jakova," *RVM* 9 (1960), 5–50.
- Dimitrijević, Danica, *Le cimetière gépide à "Kormadin" près de Jakovo en Srem, Serbie*, Inventaria Archaeologica 7 Y57–66 (Belgrade, 1964).
- Dinchev, Vencislav, "Gesellschaftliche Komponenten der Struktur frühbyzantinischer befestigter Siedlungen auf dem Territorium des heutigen Bulgarien," in *Karasura, I. Untersuchungen zur Geschichte und Kultur des alten Thrakien. 15 Jahre Ausgrabungen in Karasura. Internationales Symposium Cirpan/Bulgarien, 1996*, ed. M. Wendel, Schriften des Zentrums für Archäologie und Kulturgeschichte des Schwarzmeerraumes 1 (Weissbach, 2001), 217–35.
- Dinchev, Vencislav, "Seloto v dнешnata bălgarska teritoria prez rannovizantiiskata epokha," in *Sbornik v chest na prof. Margarita Tacheva*, eds. K. Boshnakov and D. Boteva-Boianova (Sofia, 2002), 156–63.
- Dobos, Alpár, "Plunder or ritual? The phenomenon of grave reopening in the row-grave cemeteries from Transylvania (6th–7th centuries)," *Annales Universitatis Litterarum et Artium Miskolciensis* 18/2 (2014), 135–62.
- Dobos, Alpár and Coriolan Opreanu, *Migration Period and Early Medieval Cemeteries at Fântânele (Bistrița-Năsăud County)*, Patrimonium Archaeologicum Transylvanicum 5 (Cluj-Napoca, 2012).
- Dobrzańska, Halina, "Wczesnosłowiańska osada w Igołomi," *Archaeoslavica* 3 (1998), 71–114.
- Dobrzańska, Halina, Tomasz Kalicki, Bartłomiej S. Szmoniewski, "Uwarunkowania środowiskowe wytwórczości pozarolniczej w okresie rzymskim i wczesnośredniowiecznym w dolinie Wisły koło Krakowa," in *Środkowiskowe uwarunkowania lokalizacji osadnictwa*, eds. L. Domańska, P. Kittel, and J. Forsysiak, Środkowisko—Człowiek—Cywilizacja 2 (Poznań, 2009), 155–74.
- Doda, Nikollë. "Varreza arbërore e Prosekut (rrethi i Mirditës)," *Iliria* 19 (1989), 137–77.
- Doležal, Stanislav, "Who was Jordanes?" *Byzantion* 84 (2014), 145–64.
- Dolinescu-Ferche, Suzana, *Așezări din secolele III și VI e.n. în sud-vestul Munteniei. Cercetările de la Dulceanca*, Biblioteca de arheologie 24 (Bucharest, 1974).

- Dolinescu-Ferche, Suzana, "Ciurel, habitat des VI–VII-e siècles d. n. è.," *Dacia* 23 (1979), 179–230.
- Dolinescu-Ferche, Suzana, "Contributions archéologiques sur la continuité dacoromaine. Dulceanca, deuxième habitat du VI<sup>e</sup> siècle d. n. è.," *Dacia* 30 (1986), 121–54.
- Dolinescu-Ferche, Suzana, "Habitats du VI-e et VII-e siècles de notre ère à Dulceanca IV," *Dacia* 36 (1992), 125–77.
- Dolinescu-Ferche, Suzana and Margareta Constantiniu, "Un établissement du VI-e siècle à Bucarest," *Dacia* 25 (1981), 289–329.
- Dolukhanov, Pavel M. and Evgenii N. Nosov, "Paleolandshafty i zaselenie territorii Severo-Zapada v VI–X vv.," in *Novoe v arkheologii Severo-Zapada SSSR*, eds. A.N. Kirpichnikov, V.M. Masson, and E.N. Nosov (Leningrad, 1985), 19–23.
- Domanovskii, A.N., "O social'noi specifike torgovli prodovol'stvem v provincial'nom vizantiiskom gorode epokhi 'temnykh vekov' (na primere Khersona v pis'makh papy Martina I)," in *Problemy istorii i arkheologii Ukrainy. Materialy X Mezhdunarodnoi nauchnoi konferencii, posviashchennoi 125-letiiu professora K.E. Grinevicha, 4–5 noiabria 2016 goda* (Kharkiv, 2016), 59–60.
- Domański, Grzegorz, "Ceramika z okresu wędrówek ludów na Śląsku," in *Archaeologia o początkach Słowian. Materiały z konferencji, Kraków, 19–21 listopada 2001*, eds. P. Kaczanowski and M. Parczewski (Cracow, 2005), 253–66.
- Donat, Peter, "Zur Frage des Bodeneigentums bei den Westslawen. Ein Diskussionsbeitrag," *Jahrbuch für Geschichte des Feudalismus* 4 (1980), 9–26.
- Donat, Peter, "Die Entwicklung der Agrarproduktion und die Herausbildung des feudalen Bodeneigentums bei den Westslawen," in *Produktivkräfte und Gesellschaftsformationen in vorkapitalistischer Zeit*, eds. J. Herrmann and I. Sellnow, Veröffentlichungen des Zentralinstituts für Alte Geschichte und Archäologie der Akademie der Wissenschaften der DDR 12 (Berlin, 1982), 583–89.
- Doncheva-Petkova, Liudmila, *Bălgarska bitova keramika prez rannoto srednevekovie (vtorata polovina na VI-krai na X v.)* (Sofia, 1977).
- Dörner, Egon, "Un mormînt de epocă avară la Sînpetru German," *SCIV* 11, no. 2 (1960), 423–33.
- Dostál, Bořivoj, "Zemědělská výroba na území ČSSR v 6.–10. století," *Archaeologia historica* 1 (1976), 9–26.
- Dovzhenok, V.I., "Cherty khoziaistva i obshchestvennoi organizacii u slavian Podneprov'ia v period zaseleniia Balkan," *AAASH* 17 (1965), 29–35.
- Drace-Francis, Alex, "Zur Geschichte des Südosteuropakonzpts bis 1914," in *Europa und die Grenzen im Kopf*, eds. K. Kaser, D. Gramshamer-Hohl, and R. Pichler, Wieser Enzyklopädie des europäischen Ostens 11 (Klagenfurt/Celovec, 2003), 275–86.
- Drauschke, Jörg and Susanne Greiff, "Chemical aspects of Byzantine glass from Caričin Grad/Iustiniana Prima (Serbia)," in *Glass in Byzantium—Production, Usage, Analyses. International Workshop Organised by the Byzantine Archaeology Mainz*,

- 17th–18th of January 2008, *Römisch-Germanisches Zentralmuseums*, eds. J. Drauschke and D. Keller, RGZM Tagungen 8 (Mainz, 2010a), 25–46.
- Drauschke, Jörg and Susanne Greiff, “Chemical Early Byzantine glass from Caričin Grad/Iustiniana Prima (Serbia): first results concerning the composition of raw glass chunks,” in *Glass Along the Silk Road, from 200 BC to AD 1000. International Conference Within the Scope of the “Sino-German Project on Cultural Heritage Preservation” of the RGZM and the Shaanxi Provincial Institute of Archaeology, December 11th–12th 2008*, eds. B. Zorn and A. Hilgner, RGZM 9 (Mainz, 2010b), 53–70.
- Draževa, Conia, “Gradskite centrove po iuzhnoto bălgarsko Chernomorie prez VII–XV vek—posrednici mezhdu Bălgariia i Vizantiia,” in *Niš and Bzyantium. III Symposium, Niš, 3–5 June 2004. The Collection of Scientific Wors 3*, ed. M. Rakocija (Niš, 2005), 225–40.
- Drobusheskii, A.I., “Okhrannyye issledovaniia na poseleniia u d. Proskurni (Proskurni II) v Gomel’skom Podneprov’e,” in *Arkheologiia epokhi siaredneviakouia (da 75-goddzhia z dnia narodzhennia P.F. Lysenki)*, ed. S.P. Vitsiaz (Minsk, 2006), 18–32.
- Drozdová, Eva, Josef Unger, Václav Smrčka, Alena Němčková and Petr Krupa, “Anthropological examination of skeletal remains of a princess buried at the ‘Žuráň’ barrow (South Moravia, Czech Republic),” in *Glaube, Kult und Herrschaft. Phänomene des Religiösen im 1. Jahrtausend n. Chr. in Mittel- und Nordeuropa. Akten des 59. internationalen Sachsensymposions unde der Grundprobleme der frühgeschichtlichen Entwicklung im Mitteldonauraum*, eds. U. von Freeden, H. Friesinger and E. Wamers, Kolloquien zur Vor- und Frühgeschichte 12 (Bonn, 2009), 163–72.
- Dubynin, A.F., “Malyshevskii mogil’nik (k istorii nizhnei Oki I tysiacheletii n.e.),” *KSDPI* 25 (1949), 134–36.
- Dubynin, A.F., “O plemennoi prinadlezhnosti naseleniia severnoi ukrainy Muromskoi zemli,” *SA* 3, no. 3 (1966), 67–79.
- Duczko, Władysław, “Scandinavians in the southern Baltic between the 5th and the 10th centuries AD,” in *Origins of Central Europe*, ed. P. Urbańczyk (Warsaw, 1997), 191–211.
- Dudek, Jarosław, *Chazarowie. Polityka, kultura, religia. VII–XI wiek* (Warsaw, 2016).
- Dulicz, Marek, “Miejsca, które rodzą władzę (najstarsze grody słowiańskie na wschód od Wisły),” in *Człowiek, sacrum, środowisko. Miejsca kultu we wczesnym średniowieczu*, ed. S. Moździoch, Spotkania Bytomskie 4 (Wrocław, 2000), 85–98.
- Dulicz, Marek, “Najstarsze grody wczesnośredniowieczne,” in *Wspólnota dziedzictwa kulturowego ziem Białorusi i Polski*, eds. A. Koško and A. Kalečyc (Warsaw, 2004), 305–07.
- Dulicz, Marek, *Frühe Slawen im Gebiet zwischen unterer Weichsel und Elbe. Eine archäologische Studie*, Studien zur Siedlungsgeschichte und Archäologie der Ostseegebiete 7 (Neumünster, 2006).

- Dulnicz, Marek, "Wczesnosłowiańskie obiekty archeologiczne na południe od Karpat, Sudetów i Rudaw datowane metodami bezwzględnyymi," *APol* 52 (2007), 81–130.
- Dulnicz, Marek, "Die sogenannten frühslawischen Burgen als Zentralorte," in *Frühgeschichtliche Zentralorte in Mitteleuropa. Internationale Konferenz und Kolleg der Alexander von Humboldt-Stiftung zum 50. Jahrestag des Beginns archäologischer Ausgrabungen in Pohansko bei Břeclav, 5.–9.10.2009, Břeclav, Tschechische Republik*, eds. J. Macháček and Š. Ungerma, *Studien zur Archäologie Europas* 14 (Bonn, 2011), 197–201.
- Dulnicz, Marek and Waldemar Andrzej Moszczyński, "Nowe dane o początkach grodu w Szeligach," in *Osadnictwo pradziejowe i wczesno średniowieczne w dorzeczu Stupianki, pod Płockiem*, ed. M. Dulnicz, *Archeologia Mazowsza i Podlasia. Studia i Materiały* 1 (Warsaw, 1998), 95–98.
- Dumanov, Boian, "The late antique workshops of jewellery south of the Lower Danube. Direct and indirect evidence of local production," in *The Lower Danube Roman Limes (1st–6th c. AD)*, eds. L. Vagalinski, N. Sharankov and S. Torbatov (Sofia, 2012), 405–28.
- Dumitrașcu, Sever, "O locuință-atelier de lucrat piepteni (sec. VI e.n.) descoperită la Biharea," *Crisia* 12 (1982), 107–21.
- Dumitrașcu, Sever, "Un atelier de lucrat piepteni descoperit la Biharea," *Crisia* 15 (1985), 61–96.
- Dumitrașcu, Sever, *Biharea I. Săpături arheologice din anii 1973–1980* (Oradea, 1994).
- Dumpe, L., "Jautājuma par izkopts attīstību Latvijā," *Izvēstīti Akademii Nauk Latvīskoi SSR*, no. 11 (1958), 17–30.
- Dunn, Archibald W., "The transition from polis to kastron in the Balkans (III–VII cc.): general and regional perspectives," *BMGs* 18 (1994), 60–80.
- Dunn, Archibald W., "Stages in the transition from the late antique to the middle Byzantine urban centre in southern Macedonia and southern Thrace," in *Aphieroma ston N.G.L. Hammond*, *Parartema Makedonikon* 7 (Thessaloniki, 1997), 137–50.
- Dunn, Archibald W., "Continuity and change in the Macedonian countryside from Gallienus to Justinian," in *Recent Research on the Late Antique Countryside*, eds. W. Bowden, L. Lavan, and C. Machado, *Late Antique Archaeology* 2 (Leiden/Boston, 2004), 535–86.
- Durliat, Jean. *De la ville antique la ville byzantine. Le problème des subsistances*, Collection de l'Ecole française de Rome 136 (Rome, 1990).
- Dutton, Paul. "Observations on early medieval weather in general, bloody rain in particular," in *The Long Morning of Medieval Europe. New Directions in Early Medieval Studies*, eds. J.R. Davis and M. McCormick (Aldershot/Burlington, 2008), 167–80.
- Duval, Noël, Miroslav Jeremić and Vladislav Popović, "Historiques des recherches," in *Caričin Grad. III. L'acropole et ses monuments (cathédrale, baptistère et bâtiments*

- annexes*), eds. N. Duval and V. Popović, Collection de l'École Française de Rome 75.3 (Rome/Belgrade, 2010), 1–32.
- Dvornichenko, Andrei Iu., “O vostochnoslavianskom politogeneze v VI–X vekakh,” in *Rossica antiqua 2006. Issledovaniia i materialy*, eds. A.Iu. Dvornichenko and A.V. Maiorov (St. Petersburg, 2006), 184–95.
- Dvoržak Schrunck, Ivančica, “Dioklecijanova palača od 4. do 7. stoljeća u svjetlu keramičkih nalaza,” *Vjesnik Arheološkog Muzeja u Zagrebu* 22 (1989), 91–105.
- Dvoržak Schrunck, Ivančica, “Late Roman and early Byzantine ceramic trade in Dalmatia: from the fourth to the eighth century,” in *Acts. XVIIIth International Congress of Byzantine Studies. Selected Papers: Moscow 1991*, eds. I. Ševčenko, G.G. Litavrin and W.K. Hanak, vol. 2, Byzantine Studies, Supplementum 1 (Shepherdstown, 1996), 282–88.
- Dyggve, Ejnar, *History of Salonitan Christianity*, Instituttet for sammenlignende kulturforskning. Serie A, Forelesninger 21 (Oslo, 1951).
- Dymowski, Arkadiusz, Mariola Orzechowska, and Mirosław Rudnicki, “Eine frühbyzantinische Münze aus der multikulturellen Siedlung von Tałty, Fundstelle II in Masuren (Nordostpolen),” *AAC* 47 (2012), 215–33.
- Dzieduszycki, Wojciech, “Społeczno-ekonomiczne uwarunkowania powiązań Pomorza z Kujawami we wczesnym średniowieczu,” *SLAnt* 33 (1991–1992), 41–63.
- Dzino, Danijel, “The rise and fall of the Dalmatian ‘big-men’: social structures in late antique, post-Roman and early medieval Dalmatia (ca. 500–850),” in *The Empire and Barbarian in South-Eastern Europe in Late Antiquity and Early Middle Ages*, eds. S. Vitliyanov and I. Topalilov (Shumen, 2014), pp. 127–52.
- Dzino, Danijel, “Post-Roman Dalmatia: collapse and regeneration of a complex social system,” in *Imperial Spheres and the Adriatic. Byzantium, the Carolingians and the Treaty of Aachen (812)*, eds. M. Ančić, J. Shepard, and T. Vedriš (London/New York, 2017), 155–73.
- Dzino, Danijel, “Starokršćanski bazilikalni kompleks i grobovi u tumulima u Ljupču: Odgonetanje ‘mračnog’ doba Dalmacije,” *SP* 44–45 (2017–2018), 89–113.
- Earle, Timothy K., “A model of subsistence change,” in *Modeling Change in Prehistoric Subsistence Economies*, eds. T.K. Earle and A.L. Christenson (New York, 1980), 1–29.
- Earle, Timothy K., “Prehistoric economies and the archaeology of exchange,” in *Contexts of Prehistoric Exchange*, eds. J.E. Ericson and T.K. Earle (New York, 1982), 1–12.
- Earle, Timothy K., “Positioning exchange in the evolution of human society,” in *Prehistoric Exchange Systems in North America*, eds. T.G. Baugh and J.E. Ericson (New York, 1994), 419–38.
- Earle, Timothy K., *How Chiefs Come to Power. The Political Economy in Prehistory* (Stanford, 1997).

- Earle, Timothy K., "Archaeology, property, and prehistory," *ARA* 29 (2000), 39–60.
- Earle, Timothy K., "Political economies of chiefdoms and agrarian states," in *Bronze Age Economics. The Beginnings of Political Economies*, ed. T.K. Earle (Boulder, 2002), 1–18.
- Earle, Timothy K., "Exchange systems in prehistory," in *Trade and Exchange. Archaeological Studies from History and Prehistory*, eds. C.D. Dillian and C.L. White (New York, 2010), 205–17.
- Earle, Timothy K., "Redistribution and the political economy: the evolution of an idea," *American Journal of Archaeology* 115 (2011), 237–44.
- Ebersbach, Renate, "My farmland, our livestock. Forms of subsistence farming and forms of sharing in peasant communities," in *The Principle of Sharing. Segregation and Construction of Social Identities at the Transition from Foraging to Farming. Proceedings of a Symposium Held on 29th–31st January 2009 at the Albert-Ludwig-University of Freiburg, hosted by the Department of Near Eastern Archaeology*, ed. Marion Benz, Studies in Early Near Eastern Production, Subsistence, and Environment 14 (Berlin, 2010), 159–82.
- Efimenko, P.P., "K istorii zapadnogo Povolzh'ia v I tysicheletii n.e. po arkheologicheskim istochnikam," *SA* 2 (1937), 39–58.
- Eggers, Martin, "Samo, 'der erste König der Slawen'. Eine kritische Forschungsbericht," *Bohemia* 42 (2001), 62–83.
- Egor'kov, Aleksandr N., "Svoistva i rol' svincovo-oloviannykh splavov v 'drevnostiakh antov'," in *Slaviane vostochnoi Evropy nakanune obrazovaniia drevnerusskogo gosudarstva. Materialy mezhdunarodnoi konferencii, posviashchennoi 110-letiiu so dnia rozhdeniia Ivana Ivanovicha Liapushkina (1902–1968), 3–5 dekabria 2012 g., Sankt-Peterburg*, eds. O.A. Shcheglova and V.M. Goriunova (St. Petersburg, 2012), 198–201.
- Egor'kov, Aleksandr N. and Vlasta E. Rodinkova, "Sostav metalla izdelii iz Kurilovskogo klada rannesrednevekovogo vremeni (po rezul'tatam optiko-emissionnoi spektrografii)," *KSIIA* 233 (2014), 168–77.
- Egor'kov, Aleksandr N. and Ol'ga A. Shcheglova, "Sostav svincovo-oloviannykh splavov ranneslavianskikh kladov 'drevnostei antov'," *Myslennoe drevo* (2000), available online at <https://www.myslennedrevo.com.ua/ru/Sci/Archeology/Archeometry/Applied/GaponovkaPewters.html> (visit of August 25, 2020).
- Egor'kov, Aleksandr N. and Ol'ga A. Shcheglova, "Metall 'antskikh' kladov po rezul'tatam emissionno-spektral'nogo analiza," in *Drevnie remeslenniki Priural'ia. Materialy Vserossiiskoi nauchnoi konferencii (Izhevsk, 21–23 noiabria 2000 g.)*, ed. V.I. Zav'ialov (Izhevsk, 2001), 280–307.
- Egor'kov, Aleksandr N. and Ol'ga A. Shcheglova, "Metal iz Kozievki/Novoi Odessy," in *Slaviano-russkoe iuvelimoe delo i ego istoki. Mezhdunarodnaia nauchnaia konferenciia,*

- posviashchennaia 100-letiiu so dnia rozhdeniia Gali Fedorovny Korzukhinoi. Tezisy dokladov*, eds. A.A. Peskova and O.A. Shcheglova (St. Petersburg, 2006), 21–24.
- Eisner, Jan, “Dvě přílby typu Baldenheimského z Poiplí,” *Historica slovaca* 3–4 (1945–1946), 5–43.
- Engels, Frederick, *The Origin of the Family, Private Property, and the State*, transl. E. Untermann (Chicago, 1902).
- Engels, Frederick, *Selected Works in One Volume* (New York, 1968).
- Ensor, Bradley E., “Social formation analysis. Modes, class, gender, and the multiple contexts for agency,” in *Modes of Production and Archaeology*, eds. R.M. Rosenzweig and J.J. Cunningham (Gainesville, 2017), 233–52.
- Ercegović-Pavlović, Slavenka, *Les nécropoles romaines et médiévales de Mačvanska Mitrovica*, Sirmium 12 (Belgrade, 1980).
- Erdélyi, István, “A section of the Csolnok Avar cemetery,” *AAASH* 40 (1988), 191–206.
- Erdélyi, István, “Bemerkungen zur Gesellschaft der Awaren,” *Acta Antiqua Academiae Scientiarum Hungaricae* 33 (1990–1991), 407–11.
- Erdélyi, István and Péter Németh, “A Várpalota-gimnáziumi avar temető (a Bakonyi Múzeum avarkori leletanyagának ismertetése, 1.,” *VMMK* 8 (1969), 167–98.
- Erdélyi, István, Esthér K. Ojtózi, and Vladimir F. Gening. *Das Gräberfeld von Newolino. Ausgrabungen von A. V. Schmidt und der archäologischen Kama-Expedition*, *Archaeologia Hungarica* 46 (Budapest, 1969).
- Eremeev, Ivan I. and O.F. Dziuba. *Ocherki istoricheskoi geografii lesnoi chasti puti iz variag v greki. Arkheologicheskie i paleograficheskie issledovaniia mezhdru Zapadnoi Dvinoi i ozerom Il'men'*, *Trudy Instituta Istorii Material'noi Kul'tury* 33 (St. Petersburg, 2010).
- Ermolova, Irina E. “Politika Vizantii po otnosheniiu k kochevnikam v V–VI vv.,” in *Vostochnaia Evropa v istoricheskoi retrospektive. K 80-letiiu V.T. Pashuto*, eds. T.N. Dzhakson and E.A. Mel'nikova (Moscow, 1999), 72–78.
- Erofeeva, E.N., N.P. Travkin and A.V. Utkin, “Kochkinskii gruntovyi mogil'nik,” in *Etnogenez i etnicheskaiia istoriia mariicev*, ed. T.A. Tovashova (Ioshkar-Ola, 1988), 99–125.
- Escalona, Julio, “The early Middle Ages: a scale-based approach,” in *Scale and Scale Change in the Early Middle Ages. Exploring Landscape, Local Society, and the World Beyond*, eds. J. Escalona and A. Reynolds, *The Medieval Countryside* 6 (Turnhout, 2011), 9–30.
- Evans, Robert K., “Early craft specialization: an example from the Balkan Chalcolithic,” in *Social Archaeology. Beyond Subsistence and Dating*, eds. C.L. Redman et al. (New York, 1978), 113–29.
- Fancsalszky, Gábor, “Három avar kori temető Tiszavasváriban,” *CAH* (1999), 107–41.
- Fazioli, Kirk Patrick, “Rethinking ethnicity in early medieval archaeology: social identity, technological choice, and communities of practice,” in *From West to East*.



- Current Approaches to Medieval Archaeology*, ed. S.D. Stull (Newcastle upon Tyne, 2014), 20–39.
- Fazioli, Kirk Patrick, *The Mirror of the Medieval. An Anthropology of the Western Historical Imagination* (New York/Oxford, 2017).
- Fedorov, Georgii B., *Naselenie Prutsko-Dnestrovskogo mezhdurech'ia v I tysiacheletii n. e.*, *Materialy issledovaniia po arkhologii SSSR* 89 (Moscow, 1960).
- Fedoseev, Nikolai F., Krzysztof Domzalski, Andrei Opaît, and Aleksei V. Kulikov, “Post-Justinian pottery deposit from Pantikapaion-Bosporus: rescue excavations at 12, Teatral'naja St. in Kerch, 2006,” *Archeologia* 61 (2010), 63–94.
- Feinman, Gary M., and Linda M. Nicholas, “A multiscale perspective on market exchange in the Classic-period valley of Oaxaca,” in *Archaeological Approaches to Market Exchange in Ancient Societies*, eds. C.P. Garraty and B.L. Stark (Boulder, 2010), 85–98.
- Feissel, Denis, *Recueil des inscriptions chrétiennes de Macédoine du III<sup>e</sup> au VI<sup>e</sup> siècle*, *Bulletin de Correspondance Hellénique*, Supplément 8 (Athens, 1983).
- Feissel, Denis and Anne Philippidis-Braat, “Inventaires en vue d'un recueil des inscriptions historiques de Byzance, III. Inscriptions du Péloponnèse (à l'exception de Mistra),” *T&M* 9 (1985), 267–395.
- Feller, Laurente, “Changements économiques et changements sociaux dans l'Europe occidentale du Haut Moyen Age,” in *De Mahoma a Carlomagno. Los primeros tiempos (siglos VII–IX)*. *Actas de la XXXIX Semana de Estudios Medievales de Estella. 17 al 20 de julio de 2012* (Pamplona, 2013), 435–55.
- Ferluga, Jadran, “L'Istria tra Giustiniano e Carlo Magno,” *AV* 43 (1992), 175–90.
- Ferluga, Jadran, “Mercati i mercanti fra Mar Nero e Adriatico: dal VII all'XI secolo,” in *Mercati i mercanti nell'Alto Medioevo: l'area euroasiatica, l'area mediterranea*, 23–29 aprile 1992, *Settimane di studio del Centro italiano di studi sull'alto medioevo* 40 (Spoleto, 1993), 443–98.
- Fernández Delgado, Aitor, “*In aere aedificare*. Las iniciativas político-militares del emperador Mauricio en los Balcanes durante la “decada gloriosa”: ¿solución o gestación de una nueva crisis?” in *Crisis en Roma y soluciones desde el poder*, eds. G. Bravo and R. González-Salineró, *Signifer* 47 (Madrid/Salamanca, 2016), 451–77.
- Fettich, Nándor, *Az avarkori műipár Magyarországon. Fogazási ornamentika és ötvöseszközleletek*, *Archaeologia Hungarica* 1 (Budapest, 1926).
- Fettich, Nándor, “A jutasi avarkori temető revíziója,” *VMMK* 3 (1964), 79–118.
- Fiala, Anton, “K objavu miliarenske Constansa II. z pokladu zo Zemianskeho Vrbovku,” *Numismatický sborník* 17 (1986), 15–20.
- Fiedler, Uwe, *Studien zu Gräberfeldern des 6. bis 9. Jahrhunderts an der unteren Donau*, *Universitätsforschungen zur prähistorischen Archäologie* 11 (Bonn, 1992).

- Filiposki, Toni, "The Komani-Krue settlements, and some aspects of their existence in the Ohrid-Struga valley (VII–VIII century)," *Macedonian Historical Review* 1 (2010), 67–80.
- Flad, Rowan K., and Zachary X. Hruby, "'Specialized' production in archaeological contexts: rethinking specialization, the social value of products, and the practice of production," *Archaeological Papers of the American Anthropological Association* 17, no. 1 (2007), 1–19.
- Flerov, Valerii S., *Rannesrednevekoye iurtoobraznye zhilishcha Vostochnoi Evropy* (Moscow, 1996).
- Flerov, Valerii S., "O rannesrednevekovykh kochev'iakh v Priazov'e i na Nizhnem Donu. K metodike polevykh issledovaniï," in *Istoriia i kul'tura srednevekovykh narodov stepnoi Evrazii. Materialy II Mezhdunarodnogo konferenciia srednevekovoï arkheologii evraziiskikh stepi* (Barnaul, sentiabr' 2012 g.), ed. A.A. Tishkin (Barnaul, 2012), pp. 25–28.
- Fodor, István, "Dal nomadismo alla stanzialità," in *Gli Avari. Un popolo d'Europa*, ed. G.C. Menis (Udine, 1995), 71–78.
- Fodor, István, "Avar kori lakóházak Hajdúnánáson," in *Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére*, ed. T. Vida (Budapest, 2012), 709–20.
- Fomin, M.V., *Pogrebal'naia tradiciia i obriadi v vizantiiskom Khersone (IV–X vv.)* (Kharkiv, 2011).
- Förster, Richard, "Kaiser Hadrian und die Taktik des Urbicius," *Hermes* 12 (1877), 449–71.
- Fóthi, Erzsébet, Orsolya Heinrich-Tamáska, Róbert Müller and Ágota S. Perémi, "Möglichkeiten und Grenzen der Radiokarbonanalyse zur Datierung der Keszthely-Kultur," in *Dunkle Jahrhunderte in Mitteleuropa? Tagungsbeiträge der Arbeitsgemeinschaft Spätantike und Frühmittelalter. 1. Rituale und Moden (Xanten, 8. Juni 2006). 2. Möglichkeiten und Probleme archäologisch-naturwissenschaftlicher Zusammenarbeit (Schleswig, 9.–10. Oktober 2007)*, eds. O. Heinrich-Tamáska, N. Krohn and S. Ristow, Schriftenreihe Studien zu Spätantike und Frühmittelalter 1 (Hamburg, 2009), 307–34.
- Fourlas, Benjamin, "Κτίστας θεωρεῖς. Wer ist der zivile Würdenträger auf dem Stiftermosaik in der Demetrios-Kirche in Thessaloniki?" *Symmeikta* 20 (2010), 195–244.
- Foy, Danièle, Maurice Picon, Michèle Vichy, Valérie Thirion-Merle, "Caractérisation des verres de la fin de l'Antiquité en Méditerranée occidentale: l'émergence de nouveaux courants commerciaux," in *Echanges et commerce du verre dans le monde antique. Actes du colloque de l'Association française pour l'archéologie du verre, Aix-en-Provence et Marseille, 7–9 juin 2001*, eds. D. Foy, M. Picon, M. Vichy and V. Thirion-Merle, Monographies Instrumentum 24 (Montagnac, 2003), 41–86.

- Franke, Helmut, "Zur Herstellung der Kerbschnittfibel von Groß Kōris, Kr. Königs Wusterhausen," *Veröffentlichungen des Museums für Ur- und Frühgeschichte Potsdam* 21 (1987), 237–41.
- Frantz, Alison, *The Athenian Agora. XXIV: Late Antiquity: A.D. 267–700* (Princeton, 1988).
- Franzén, Rickard, "The image of Loki from Proosa in Estonia: a Migration Period high status buckle with an elevated circular fastening plate in the light of similar buckles recovered in Scandinavia," *Fennoscandia archaeologica* 26 (2009), 53–80.
- Freeden, Uta von, "Ausgewählte Befunde aus dem langobardenzeitlichen Gräberfeld von Szólád, Komitat Somogy, Ungarn," in *Kulturwandel in Mitteleuropa. Langobarden—Awaren—Slawen; Akten der Internationalen Tagung in Bonn vom 25. bis 28. Februar 2008*, eds. J. Bemmann and M. Schmauder, *Kolloquien zur Vor- und Frühgeschichte* 11 (Bonn, 2008), 399–414.
- Freeden, Uta von, "Szólád, Komitat Somogy," in *Die Langobarden. Das Ende der Völkerwanderungszeit. Katalog zur Ausstellung im Rheinischen Landesmuseum Bonn, 22.8.2008–11.1.2009*, ed. M. Hegewisch (Bonn/Darmstadt, 2008), 318–23.
- Freeden, Uta von and Tivadar Vida, "Ausgrabung des langobardenzeitlichen Gräberfeldes von Szólád, Komitat Somogy, Ungarn. Vorbericht und Überblick über langobardenzeitlichen Besiedlung am Plattensee," *Germania* 85 (2005), 359–84.
- Freeman, Jacob, "Alternative adaptive regimes for integrating foraging and farming activities," *Journal of Archaeological Science* 39 (2012), 3008–17.
- Frînculeasa, Alin and Valentin Dumitraşcu, "Studiu arheozoologic al faunei din aşezarea din mileniul I p. Chr. de la Belciug (jud. Prahova)," *BMJT* 6 (2014), 127–42.
- Frînculeasa, Alin, Nicolae Şerban, Octav Negrea, and Valentin Dumitraşcu, "Date preliminare privind aşezarea medievală timpurie de la Belciug, jud. Prahova," *BMJT* 3 (2011), 193–222.
- Fronzhulo, M.A., "O rannesrednevekovom remeslennom proizvodstve v iugovostochnom Krymu," in *Arkheologicheskie issledovaniia srednevekovogo Kryma*, O.I. Dombrovskii (Kiev, 1968), 133–51.
- Fülöp, Gyula, "Avarkori temető Kajászó-Ujmajorban," *Alba Regia* 18 (1980), 317–40.
- Fülöp, Gyula, "Awarenzeitliche Fürstenfunde von Igar," *AAASH* 40 (1988), 151–90.
- Fülöp, Gyula, "New research on finds of Avar chieftain-burial at Igar, Hungary," in *From the Baltic to the Black Sea. Studies in Medieval Archaeology*, ed. D. Austin and L. Alcock (London, 1990), 138–46.
- Furas'ev, A.G., "Poseleniia tret'ei chetverti I tys. n. e. na iuge Pskovshchiny," *AIPPP* (1992), 25–27.
- Furas'ev, A.G., "Gruntovyi mogil'nik Froly 2—novyi pogrebal'nyi pamiatnik serediny I tysiacheletiiia n. e. v Podvin'e," *TAS* 4 (2001), 94–102.
- Furas'ev, A.G., "Klimaticheskie izmeneniia na severo-zapade russkoi ravniny v I tys. n. e. i genesis kul'tury pskovskikh dlinnykh kurganov," in *Drevnosti Podvin'ia: istoricheskii*

- aspekt. *Po materialam kruglogo stola, posviashchennogo pamiat' A. M. Mikliaeva (6–8 oktiabria 1999)*, eds. G.V. Vilinbakhov, B.S. Korotkevich, A.N. Mazurkevich, and Iu. Iu. Piotrovskii (St. Petersburg, 2003), 219–25.
- Furas'ev, A.G., "Etnikul'turnye osobennosti naseleniia Iuzhnogo Kryma v VI-nachale VII v. n. e.," in *Guny, goty i sarmaty mezhdru Volgoi i Dunaem. Sbornik nauchnykh statei*, ed. A.G. Furas'ev (St. Petersburg, 2009), 190–235.
- Fusek, Gabriel, "Včasnoslovanske sidlisko v Nitre na Mikovom dvore," *SlovArch* 39, nos. 1–2 (1991), 289–328.
- Fusek, Gabriel, "Zur Chronologie der frühslawischen Periode in der Slowakei," in *Probleme der relativen und absoluten Chronologie ab Latènezeit bis zum Frühmittelalter. Materialien des III internationalen Symposiums: Grundprobleme der frugeschichtlichen Entwicklung im nördlichen Mitteldonauebiet. Kraków-Karniowice 3.–7. Dezember 1990*, eds. K. Godłowski and R. Madyda-Legutko (Cracow, 1992), 293–95.
- Fusek, Gabriel, "Frühe Slawen im Mitteldonauebiet," in *Kulturwandel in Mitteleuropa. Langobarden—Awaren—Slawen. Akten der Internationalen Tagung in Bonn vom 25. bis 28. Februar 2008*, eds. J. Bemmman and M. Schmauder (Bonn, 2008), 645–56.
- Fusek, Gabriel, Ladislav Olexa, and Jozef Zábajník, "Nové sidliskové nálezy z Nižnej Myšle. K problematike včasnoslovanského osídlenia horného Potisia," *SlovArch* 58, no. 2 (2010), 337–63.
- Fusek, Gabriel, Danica Staššiková-Štukovská, and Jozef Batora, "Neue Materialien zur Geschichte der ältesten slawischen Besiedlung der Slowakei," *Archaeoslavica* 2 (1993), 25–51.
- Füzes, Miklós F., "A jutasi és ösküi avarkori temetők növényleletei," *VMMK* 3 (1964), 437–58.
- Füzes, Miklós F., "Die Pflanzenfunde des langobardische Gräberfeldes von Vörs," *AAASH* 16 (1964), 359–408.
- Fylypchuk, Mykhailo, "Poperedni rezul'taty doslidzhennia kul'tovogo mistsia slov'ians'kogo chasu na terytorii Plisnes'kogo arkheologichnogo kompleksu 2009 r.," *Visnyk Instytutu arkheologii* 5 (2010), 135–69.
- Gaiu, Corneliu, "Așezarea din secolul al VI-lea de la Dipșa, jud. Bistrița-Năsăud," *RB* 7 (1993), 91–107.
- Gaiu, Corneliu, "Așezarea din sec. V–VI p. Chr. de la Stupini 'Vătaștina,'" *RB* 16 (2002), 113–58.
- Gál, Erika, "Bird remains from archaeological sites around Lake Balaton," in *Environmental Archaeology in Transdanubia*, eds. Cs. Zatykó, I. Juhász, and P. Sümegi, *Varia Archaeologica Hungarica* 20 (Budapest, 2007), 79–96.
- Galani-Krikou, Mína, Giorka Nikolaou, Manto Oikonomidou, Giannis Touratsoglou and Ios Tsourti, *Syntagma byzantinon "thesauron" tou Nomismatikou Mouseion (SBTh)* (Athens, 2002).

- Galkina, Elena G., "Tiurkskii kaganat i 'pozdnegunnskie' plemena v etnopoliticheskikh processakh na territorii Vostochnoi Evropy VI–VII vv.," *Riazanskii istorik*, no. 2 (2005), 60–74.
- Galkina, Elena G., "K voprosu o roli Velikoi Bulgarii v etnopoliticheskoi istorii Vostochnoi Evropy," *SSBP* 9, no. 1 (2011), 5–32.
- Gallina, Zsolt, "Az avar kori vasművesség mesterségei. A korabeli vasgyártás munkafolyamatai, változásai, specializálódása," in *Techné. A szakképzés módszerei az ókorban és a középkorban*, eds. M. Munding, K. Szovák and L. Takács (Pilicsaba, 2018), 391–450.
- Gallina, Zsolt and Péter Hornok, "Vorbericht über die archäologische Untersuchung eines awarischen Eisenverhüttungszentrums in der Gemeinde Zamárdi, Komitat Somogy (Ungarn)," in *Arts and Crafts in Medieval Rural Environment: 22nd–29th September 2005*, eds. J. Klápště and P. Sommer, *Ruralia* 6 (Turnhout, 2007), 71–81.
- Gândilă, Andrei, "Face value or bullion value? Early Byzantine coins beyond the Lower Danube border," in *Byzantine Coins in Central Europe Between the 5th and 10th Century. Proceedings from the Conference Organized by the Polish Academy of Arts and Sciences and the Institute of Archaeology of the University of Rzeszów under the Patronage of Union Académique Internationale (Programme No. 57 Moravia Magna), Kraków, 23–26 IV 2007*, ed. M. Wołoszyn, *Moravia Magna, Seria Polona* 3 (Cracow, 2009), pp. 449–71.
- Gândilă, Andrei, "Un tezaur de monede bizantine timpurii descoperit la Capidava," *Cercetări numismatice* 15 (2009), 87–105.
- Gândilă, Andrei, "Heavy money, weightier problems: the Justinianic reform of 538 and its economic consequences," *Revue numismatique* 169 (2012), 363–402.
- Gândilă, Andrei, "Marginal money: coins, frontiers, and barbarians in early Byzantium (6th–7th centuries)," Ph.D. Dissertation, University of Florida (Gainesville, 2013).
- Gândilă, Andrei, "Going east: western money in the early Byzantine Balkans, Asia Minor and the circumponitic region (6th–7th c.)," *Rivista italiana di numismatica e scienze affini* 117 (2016), 129–87.
- Gândilă, Andrei, *Cultural Encounters on Byzantium's Northern Frontier, c. AD 500–700. Coins, Artifacts and History* (Cambridge/New York, 2018a).
- Gândilă, Andrei, "The mint of Thessalonica and the Mediterranean economy in the 6th–7th c.," *Revue belge de numismatique et de sigillographie* 164 (2018b), 426–95.
- Ganoshchenko, V.V. and Iaroslav V. Volodarets'-Urbanovych, "Skarb kola Martynivky z Pravykh Solontsiv Khersons'koi oblasti," *ADIU*, no. 3 (2019), 126–50.
- Garam, Éva, "Awarenzeitliche Glastrinkgefäße aus Kisköre," *AAASH* 25 (1973), 279–88.
- Garam, Éva, *Das awarenzeitliche Gräberfeld von Kisköre* (Budapest, 1979).
- Garam, Éva, *Katalog der awarenzeitlichen Goldgegenstände und der Fundstücke aus den Fürstengräbern im Ungarischen Nationalmuseum*, *Catalogi Musei Nationalis Hungarici. Seria archaeologica* 1 (Budapest, 1993).

- Garam, Éva, "Sepulture di principi," in *Gli Avari. Un popolo d'Europa*, ed. G.C. Menis (Udine, 1995), 125–31.
- Garam, Éva, *Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts*, Monumenta Avarorum Archaeologica 5 (Budapest, 2001).
- Garam, Éva, "Avar kori nemzetségfő sírja Maglódon," *CAH* (2005), 407–36.
- Garam, Éva, "Egy avar falu gazdálkodásáról, kézművességéről, életmódjáról a falu temetője sírjaiban talált tárgyak tükrében," in *Avarok pusztái. Régészeti tanulmányok Lőrinczy Gábor 60. születésnapjára*, eds. A. Anders, Cs. Balogh and A. Türk, Opitz Archaeologica 6 (Budapest, 2014), 279–90.
- Garam, Éva, "A zamárdi avar kori temető lovas sírjai," in *Népék és kultúrák a Kárpát-medencében. Tanulmányok Mesterházy Károly tiszteletére*, eds. L. Kovács and L. Révész (Budapest, 2016), 271–86.
- Gatev, Iordan, "Spasitelni razkopki na kásnoantichen nekropol kraii kurort Rusalka, Kavarnensko," *Arkheologicheski vesti* 1 (1998), 27–31.
- Gaul, Jerzy, "The circulation of monetary and non-monetary currency in the West-Baltic zone in the 5th and 6th centuries AD," *ArchPol* 23 (1984), 87–105.
- Gavrilov, Aleksandr V., "Une tombe nomade de l'époque post-hunnique Novopokrovka (Crimée orientale)," in *Les sites archéologiques en Crimée et au Caucase durant l'Antiquité tardive et le Haut Moyen Age*, eds. M. Kazanski and V. Soupault, Colloquia Pontica 5 (Leiden/Boston, 2000), 109–14.
- Gavritukhin, Igor O., "Gorizont prazhskoi kul'tury poseleniia Zimno 4," *Archaeoslavica* 3 (1998), 171–99.
- Gavritukhin, Igor O., "La date du 'trésor' de Pereščepina et la chronologie des antiquités de l'époque de formation du Khaganat khazar," in *La Crimée entre Byzance et le Khaganat Khazar*, ed. C. Zuckerman (Paris, 2006), 13–30.
- Gavritukhin, Igor O., "Ingumacii, sviazannye s kul'turoi osedlogo naseleniia, i ot del'nye nakhodki postgunnskogo vremeni," in *Vostochnaia Evropa v seredine I tys. n. e.*, eds. O. Gavritukhin and A.M. Oblomskii, Rannelslavianskii mir 9 (Moscow, 2007), 30–32.
- Gavritukhin, Igor O., "Poniatie prazhskoi kul'tury," in *Slozhenie russkoi gosudarstvennosti v kontekste rannesrednevekovoï v kontekste rannesrednevekovoï istorii Starogo sveta. Materialy mezhdunarodnogo konferencii, sostoiavsheisia 14–18 maia 2007 goda v Gosudarstvennom Ermitazhe*, eds. B.S. Korotkevich, D.A. Machinskii, and T.B. Senichenkova, Trudy Gosudarstvennogo Ermitazha 49 (St. Petersburg, 2009), 7–25 and 629.
- Gavritukhin, Igor O. and Andrei M. Oblomskii, "Gaponovskii klad (predvaritel'naiia publikaciia)," *RA*, no. 4 (1995), 36–49.
- Gavritukhin, Igor O. and Andrei M. Oblomskii, *Gaponovskii klad i ego kul'turno-istoricheskii kontekst*, Rannelslavianskii mir 3 (Moscow, 1996).

- Gavritukhin, Igor O. and A.G. Ivanov, "Pogrebenie 552 Varninskogo mogil'nika i nekotorye voprosy izucheniia rannesrednevekovykh kul'tur Povolzh'ia," in *Permskii mir v rannem srednevekov'e*, ed. A.G. Ivanov, Archaeologia Permica 1 (Izhevsk, 1999), 99–159.
- Gavritukhin, Igor O. and Michel Kazanski, "Bosporus, the Tetraxite Goths and the northern Caucasus region during the second half of the fifth and the sixth centuries," in *Neglected Barbarians*, ed. F. Curta, Studies in the Early Middle Ages 32 (Turnhout, 2010), 83–136.
- Gavritukhin, Igor O. and Anna V. Mastykova, "K izucheniiu kul'turnykh sviazei iugovostochnoi Evropy VII v. n. e.," in *Kul'tury stepei Evrazii vtoroi poloviny I tysiacheletia n.e. Tezisy dokladov Mezhdunarodnoi nauchnoi arkheologicheskoi konferencii 14–17 noiabria 1995 g.*, eds. D.A. Stashenkov, A.F. Kochkina, and V.N. Sorokin (Samara, 1995), 16–19.
- Gavritukhin, Igor O. and Andrei M. Oblomskii, *Gaponovskii klad i ego kul'turno-istoricheskii kontekst*, Rannelslavianskii mir 3 (Moscow, 1996).
- Gębica, Piotr, Leszek Starkel, Andrij Jacyšin, and Marek Krąpiec, "Medieval accumulation in the Upper Dniester river valley: the role of human impact and climate change in the Carpathian Foreland," *Quaternary International* 293 (2013), 207–18.
- Gening, Vladimir F., *Arkheologicheskie pamiatniki Udmurtii* (Izhevsk, 1958).
- Gening, Vladimir F., "Demenkovskii mogil'nik lomovatovskoi kul'tury," *VAU* 6 (1964), 94–162.
- Gening, Vladimir F., "Pamiatniki u s. Kushnarenkovo na r. Beloi (VI–VII vv. n.e.)," in *Issledovaniia po arkheologii Iuzhnogo Urala*, ed. R.G. Kuzeev (Ufa, 1976), 90–136.
- Gening, Vladimir F., "Mogil'nik chepeckoi kul'tury v der. Ves'iakar (IX–XII vv.)," in *Severnye udmurty v nachale II tysiacheletia n. e.*, ed. V.F. Gening (Izhevsk, 1979), 87–106.
- Gening, Vladimir F., "Oputiatskoe gorodishche—metallurgicheskii centr kharinskogo vremeni v Prikam'e (2-ia polovina V–1-ia polovina VI vv. n.e.)," in *Pamiatniki epokhi srednevekov'ia v Verkhnem Prikam'e. Sbornik statei*, ed. V.F. Gening (Izhevsk, 1980), 92–135 and 197–217.
- Georgantzis, Petros., "Semantikoteres Skythikes epidromes ste Thrake kata tous 50 kai 60 m. Ch. aiones," *BF* 30 (2011), 111–38.
- Georgiev, Pavel, "Rannobalgarskata kultura V–VII vek—kultura 'na kolela,'" in *Izsledvaniia po balgarska srednevekovna arkheologia. Sbornik v chest na prof. Rasho Rashev*, ed. P. Georgiev (Sofia, 2007), 22–40.
- Georgiev, Zoran, "Gradishte, s. Pchinia—docnoantichki i ranovizantiski kastel," *MAA10* (1985), 199–214.
- Gerasimov, Todor, "Deux plats en argent de haute époque byzantine trouvés en Bulgarie," *CA* 16 (1966), 215–19.

- Gerasimov, Todor, "Rannokhristianska grobnica pri gr. Sandanski (Sv. Vrach)," *IAI* 29 (1966), 222–25.
- Gerasimov, Todor, "Grobница s zhivopis ot Serdica (VI v. na n. e.)," *Arkheologiya* 18, no. 2 (1976), 51–53.
- Gercen, Aleksandr G., *Mangup: gorod v krymskom podnebes'e* (Simferopol', 2001).
- Gercen, Aleksandr G., "Doros-Feodoro (Mangup): ot rannevizantiiskoi kreposti k feodal'nomu gorodu," *ADSV* 34 (2003), 94–112.
- Gercen, Aleksandr G., Valeri E. Naumenko, A.A. Dushenko, D.V. Korziuk, V.V. Lavrov, T.N. Smekalova, T. Iu. Shvedchikova and A.V. Chudin, "Novye materialy k izucheniui istoricheskoi topografii Mangupskogo gorodishcha i ego okrugii (po rezultatam mezhdisciplinarnykh issledovaniui 2015 g.)," *Uchenye zapiski Krymskogo federal'nogo universiteta im. V.I. Vernadskogo* 1 (2015), 3–28.
- Gere, László, "Előzetes jelentés a Gerjen-Váradpusztai avar temető feltárásáról," *MFME*, no. 2 (1984–1985), 221–39.
- Germanidou, Sophia, "Watermills in Byzantine Greece (fifth–twelfth centuries). A preliminary approach to the archaeology of Byzantine hydraulic milling technology," *Byzantion* 84 (2014), 185–201.
- Gerosi, Evgenia, "Rural Greece in the Byzantine period in light of new archaeological evidence," in *Heaven & Earth. Cities and Countryside in Byzantine Greece*, eds. J. Albani and E. Chalkia (Athens, 2013), 31–43.
- Giardina, Andrea, Paolo Cammarosano, and Paolo Delogu, "Economia e società nell'alto medioevo europeo. Una discussione su *Framing the Early Middle Ages* di Chris Wickham," *Storica* 34 (2006), 121–72.
- Gibson, D. Blair, "Death of a salesman: Childe's itinerant craftsman in the light of present knowledge of late prehistoric European craft production," in *Craft Specialization and Social Evolution: In Memory of V. Gordon Childe*, ed. B. Wailes (Philadelphia, 1996), 107–19.
- Giddens, Anthony, *The Constitution of Society. Outline of the Theory of Structuration* (Berkeley, 1984).
- Gil, Joan Pinar, "Coming back home? Rare evidence for contacts between the Iberian Peninsula and the Carpathian Basin in the late 5th–early 6th century," *EN* 24 (2014), 117–30.
- Giovannini, Annalisa, "Le ambre di Aquileia: connotazioni generali e correlazioni culturali," in *Roma sul Danubio. Da Aquileia a Carnuntum lungo la via dell'ambra*, eds. M. Buora and W. Jobst, *Catologhi e monografie archeologiche dei Civici musei di Udine* 6 (Udine, 2002), 159–64.
- Gjorgievski, Dejan, "Life among the ruins: medieval settlements and late antique cities, seen through recent excavations in the region of the Upper Vardar and Bregalnica rivers," in *Archaeology of a World of Changes. Byzantine Architecture, Sculpture*



- and Landscapes. Selected Papers from the 23rd International Congress of Byzantine Studies (Belgrade, 22–27 August 2016) in Memoriam Claudia Barsanti*, ed. I. Popović, BAR International Series 2973 (Oxford, 2020), 137–52.
- Gkini-Tsophopoulou, Eleni, “Stamata,” *AD* 45 (1990), 90–92.
- Gkini-Tsophopoulou, Eleni, “The Mesogeia from early Christian times to the Ottoman conquest,” in *Mesogeia. History and Culture of Mesogeia in Attica*, eds. S.A. Idea and K. Tsouni (Athens, 2001), 148–221.
- Gkini-Tsophopoulou, Eleni and Eugenia Chalkia, “Taphike palaiochristianike keramike apo ten Attike: oi periptoseis tes Stamatas kai tes Anabysos,” in *70 Diethnes Synedrio Mesaionikes Keramikes tes Mesogeiou. Thessalonike, 11–16 oktobriou 1999. Praktika*, ed. Ch. Bakirtzis (Athens, 2003), 755–58.
- Gkini-Tsophopoulou, Eleni and Anastasia G. Giankaki, “Palaiochristianiko nekrotaphieio ste these ‘Driblia’, Porto-Rafte: mia proseggise tes keramikes,” in *Keramike tes Hysteres Archaio tetas apo ton elladiko choro (308–708 ai. m. Ch.). Epistemonike synantese, Thessalonike, 12–16 noembriou 2006*, eds. D. Papanikola-Bakirtzis and D. Kousoulakou, vol. 2 (Thessaloniki, 2010), 689–711.
- Gkoutzioukostas, Andreas, “Published lead seals concerning *quaestura exercitus*,” in *Iubileen sbornik ‘Sto godini ot rozhdenieto na d-r Vasil Kharalanov (1907–2007)’*, eds. I. Iordanov, Zh. Zhekova, T. Todorov, and M. Georgieva (Shumen, 2008), 109–18.
- Gkoutzioukostas, Andreas, “‘... tou barbaron klydona barbaron stolo metatrepontos ...’ Mia protase ermeneias tes psephidotos epigraphes ton ‘ktiston’ apo ton nao tou Agiou Demetriou,” *Symmeikta* 24 (2015), 11–28.
- Gkoutzioukostas, Andreas and Xenophon M. Moniaros, *He peripheriake dioiketike anadiorganose tes byzantines autokratorias apo ton Ioustiniano A’ (527–565): he periptose tes quaestura Iustiniana exercitus, Hetaireia Vyzantinon Ereunon* 22 (Thessaloniki, 2009).
- Göckenjan, Hansgerd, “Die Landnahme der Awaren aus historischer Sicht,” in *Ausgewählte Probleme europäischer Landnahmen des Früh- und Hochmittelalters*, eds. M. Müller-Wille and R. Schneider, vol. 1, Vorträge und Forschungen 41 (Sigmaringen: Jan Thorbecke, 1993), 275–302.
- Godbout, Jacques T., “Homo donator versus Homo oeconomicus,” in *Gifts and Interests*, ed. A. Vandavelde, *Morality and the Meaning of Life* 9 (Leuven, 2000), 23–46.
- Godłowski, Kazimierz, “Zagadnienie ciągłości kulturowej i kontynuacji osadniczej na ziemiach polskich w młodszym okresie przedrzymskim, okresie wpływów rzymskich i wędrówek ludów,” *APol* 21, no. 2 (1976), 378–401.
- Godłowski, Kazimierz, “Die Frage der slawischen Einwanderung in östliche Mitteleuropa,” *Zeitschrift für Ostforschung* 28 (1979), 416–47.
- Godłowski, Kazimierz, “Zur Frage der völkerwanderungszeitlichen Besiedlung in Pommern,” *Studien zur Sachsenforschung* 2 (1980), 63–106.

- Godłowski, Kazimierz, "Ziemie polskie w okresie wędrowek ludów. Problem pierwotnych siedzib Słowian," *Barbaricum* 1 (1989), 12–63.
- Godłowski, Kazimierz, *Frühe Slawen in Mitteleuropa*, Studien zur Siedlungsgeschichte und Archäologie der Ostseegebiete 6 (Neumünster, 2005).
- Gohl, Ödön, "Bizánci súlyok," *NK* 12 (1913), 14–20.
- Gojda, Martin and Martin Kuna, "Roztoky—a newly discovered settlement area of the early Slavic period," in *Archaeology in Bohemia 1981–1985*, eds. R. Pleiner and J. Hrala (Prague, 1986), 175–83.
- Golden, Peter B., *Studies on the Peoples and Cultures of Eurasian Steppes* (Bucharest/Brăila, 2011).
- Goldina, Ekaterina V., *Busy mogil'nikov nevolinskoj kul'tury (konec IV–IX vv.)*, Materialy i issledovaniia Kamsko-Viatskoj arkhelogicheskoi ekspedicii 6 (Izhevsk, 2010).
- Goldina, Ekaterina V., *Nevolinskii mogil'nik VII–IX vv. v Permskom Predural'e*, Materialy i issledovaniia Kamsko-Viatskoj arkhelogicheskoi ekspedicii 21 (Izhevsk, 2012).
- Goldina, Rimma D., *Lomovatovskaia kul'tura v Verkhnem Prikam'e* (Irkutsk, 1985).
- Goldina, Rimma D., "Etnokul'turnye kontakty naseleniia verkhnego Prikam'ia po materialam bus," in *Congressus primus historiae Fenno-Ugricae*, ed. K. Julku (Oulu, 1996), 241–47.
- Goldina, Rimma D., "Sovremennoe sostaianie izuchennosti nevolinskoj kul'tury v Sylvensko-Irenskom porechie," in *Problemy bakal'skoj kul'tury. Materialy nauchno-prakticheskogo seminara po problemam bakal'skoj kul'tury, g. Shadrinsk, 5–6 noiabria 2007 g.*, ed. S.G. Botalov (Cheliabinsk/Shadrinsk, 2008), 115–41.
- Goldina, Rimma D., "Serdolikovyve busy s dekorom v Verkhnem Prikam'e i Velikii shelkovyi put'," *Klio*, no. 1 (2011), 111–17.
- Goldina, Rimma D., "O datirovke i khronologii nevolinskoj kul'tury (konec IV–IX v.)," in *Drevnosti Prikam'ia epokhi zheleza (VI v. do n. e.–XV v. n. e.): khronologicheskaiia atribuciia*, ed. R.D. Goldina (Izhevsk, 2012), 203–85.
- Goldina, Rimma D., "Nekotorye aspekty torgovli stekliannymi busami v Verkhnem Prikam'e v I tysiacheletii n. e.," in *Steklo Vostochnoi Evropy s drevnosti do nachala XX veka*, ed. P.G. Gaidukov (St. Petersburg, 2015), 131–42.
- Goldina, Rimma D. and Elizaveta M. Chernykh, "Forest and steppe: a dialogue of cultures (on the archaeological materials from the Kama region)," *AOASH* 58 (2005), 41–58.
- Goldina, Rimma D. and Vladimir A. Kananin, *Srednevekovye pamiatniki verkhov'ev Kamy* (Sverdlovsk, 1989).
- Goldina, Rimma D. and A.V. Nikitin, "New finds of Sasanian, Central Asian and Byzantine coins from the region of Perm', the Kama-Ural area," in *Studies in Silk Road Coins and Culture. Papers in Honour of Professor Ikuo Hirayama on his 65th Birthday*, eds. K. Tanabe, J. Cribb and H. Wang (Kamakura, 1997), 111–25.

- Goldina, Rimma D. and N.V. Vodolago, "Bartymskii mogil'nik nevolinskoï kul'tury v basseine r. Sylvy," in *Pamiatniki zheleznogo veka Kamsko-Viatskogo mezhdurech'ia. Mezhdvuzovskii sbornik nauchnykh trudov*, ed. B.G. Pliushchevskii (Izhevsk, 1984), 3–35.
- Goldina, Rimma D. and N.V. Vodolago, *Mogil'niki Nevolinskoï kul'tury v Priural'e* (Irkutsk, 1990).
- Goldina, Rimma D., O.P. Koroleva, and Leonid D. Makarov, "Agafonovskii I mogil'nik—pamiatnik lomovatovskoi kul'tury na severe Permskoï oblasti," in *Pamiatniki epokhi srednevekov'ia v Verkhnem Prikam'e. Sbornik statei*, ed. V.F. Gening (Izhevsk, 1980), 3–66 and 137–85.
- Goldina, Rimma D., Igor Iu. Pastushenko, and Elizaveta M. Chernykh, *Bartymskii kompleks pamiatnikov epokhi srednevekov'ia v Sylvenskom porech'e*, Materialy i issledovaniia Kamsko-Viatskoï arkhelogicheskoi ekspedicii 13 (Izhevsk, 2011).
- Goldina, Rimma D., Igor Iu. Pastushenko, and Elizaveta M. Chernykh, "The Nevolino culture in the context of the 7th-century East-West trade: the finds from Bartym," in *Constructing the Seventh Century*, ed. C. Zuckerman, Travaux et mémoires du Centre de recherche d'histoire et civilisation de Byzance 17 (Paris, 2013), 865–930.
- Goldstein, Ivo, "Historiografski kriteriji Prokopija iz Cezareje," *ZRVI* 24–25 (1986), 25–98.
- Goldstein, Ivo, "Discontinuity/continuity in Croatian history from the sixth to the ninth century," in *L'Adriatico della tarda antichità all'età carolingia. Atti del convegno di studio Brescia 11–13 ottobre 2001*, eds. G.P. Brogiolo and P. Delogu (Rome, 2005), pp. 195–211.
- Golev, Konstantin, "Nomadskiiat udar: sravnenie mezhdū istoricheskata sādba na khuni i avari," in *Sbornik na ezhegodnite "Kiustendilski cheteniia" 2009 g. Krizite i istoriata*, ed. V. Stanev (Kiustendil/Sofia, 2011), 291–302.
- Golofast, Larisa A., "Steklo rannevizantiiskogo Khersonesa," *MAIET* 8 (2001), 97–260.
- Golofast, Larisa A., "Shtampy V-VII vv. na posude gruppy 'fokeiskoi krasnolakovoï' iz raskopok khersonesskogo gorodishcha," *MAIET* 9 (2002), 135–216.
- Golofast, Larisa A., "Cherson in the 7th century A.D. The archaeological aspect," *Ancient West & East* 2, no. 1 (2003), 96–115.
- Golofast, Larisa A., "Early Byzantine deposits from Chersonesus," in *Kiev-Cherson-Constantinople. Ukrainian Papers at the XXth International Congress of Byzantine Studies (Paris, 19–25 August 2001)*, eds. A.I. Aibabin and G. Iu. Ivakin, Occasional Monographs 1 (Kiev/Simferopol/Paris, 2007), 45–76.
- Golofast, Larisa A., "Early Byzantine glass from the Tauric Chersonesos (Crimea)," in *Late Antique/Early Byzantine Glass in the Eastern Mediterranean*, ed. E. Laflı (Izmir, 2009), pp. 301–35.
- Golubeva, Leonilla A., "Zhenshchiny-liteishchicy (k istorii zhenskogo remeslennogo lit'ia u finno-ugrov)," *SA*, no. 4 (1984), 75–89.

- Golubeva, Leonilla A., "Devochki-liteishchicy," in *Drevnosti slavian i Rusi*, ed. B.O. Timoshchuk (Moscow, 1988), 31–34.
- Gómez, Miguel Pablo Sancho, "Dealing with the Slavs, the Antae and the like'. Danubian Byzantine warfare in the Maurice's treaty *Strategikon*," in *Vizantija i slovenite: sred-novekovni i moderni percepcii i recepcii. Zbornik na trudovi od Pettiot medjunaroden simpozium "Denovi na Justinijan I"; Skopje, 17–18.11.2017*, ed. M.B. Panov (Skopje, 2018), 49–58.
- Gomolka, Gudrun. "Bemerkungen zur Situation der späantiken Städte und Siedlungen in Nordbulgarien und ihrem Weiterleben am Ende des 6. Jahrhunderts," in *Studien zum 7. Jahrhundert in Byzanz. Probleme der Herausbildung des Feudalismus*, eds. H. Köpstein and F. Winkelmann (Berlin, 1976), 35–42.
- Gomolka-Fuchs, Gudrun, "O kontinuitete mezhdu rannevizantiiskimi i slavianskimi masterskimi VI–VII vv. na nizhnem Dunae (na primere stekol'nogo proizvodstva)," in *Trudy V Mezhdunarodnogo Kongressa slavianskoi arkheologii, Kiev 18–25 sentyabrya 1985 g.*, ed. B.A. Rybakov, vol. 3 (Moscow, 1987), 94–101.
- Gömöri, János, "Das langobardische Fürstengrab' aus Veszékény," *AGNBFR* 1 (1987), 105–19.
- Gömöri, János, "Pergőfúrók lendkerekei az Egyházásfalu melletti kora középkori vasolvasztó telep helyén (Győr-Moson-Sopron megye)," in *Mesterségek és műhelyek a középkori és kora újkori Magyarországon. Tanulmányok Holl Imre emlékére*, ed. E. Benkő, G. Kovács, and K. Orosz (Budapest, 2017), 255–68.
- Goody, Jack, *Production and Reproduction. A Comparative Study of the Domestic Domain* (Cambridge, 1976).
- Gopak, V.D. and Valentina M. Goriunova, "Chernyi metall ranneslavianskikh pami-atnikov Dneprovskogo Levoberezh'ia (po materialam E.A. Goriunova)," *SA*, no. 1 (1991), 235–45.
- Gorbanenko, Sergei A., "Paleoetnobotanichni doslidzhennia slov'ians'kykh pam'iatok Bukovyny," *Arkheologichni studii*, no. 5 (2014), 200–11.
- Gorbanenko, Sergei A., "Paleoetnobotanicheskie materialy prazhskoi kul'tury," *KSIA* 238 (2015), 296–315.
- Gorbanenko, Sergei A., "Sel'skoe khoziaistvo kolochinskoi kul'tury," in *Rannesrednevekoye drevnosti lesnoi zony Vostochnoi Evropy (V–VII vv.)*, eds. A.M. Oblomskii and I.V. Islanova (Moscow, 2016), 114–35.
- Gorbanenko, Sergei A., "Archeobotanické nálezy kultury pražského typu z Ukrajiny," *AR* 69 (2017), 461–75.
- Gorbanenko, Sergei A. and G.A. Pashkevich, *Zemlerobstvo davnikh Slov'ian (kinets' I tys. do n. e. - I tys. n. e.)* (Kiev, 2010).
- Gorbanenko, Sergei A., O.P. Zhurav'ov, and G.A. Pashkevich. *Sil'ske gospodarstvo zhite-liv Pastyrs'kogo gorodyshcha* (Kiev, 2008).

- Gorecki, Danuta, "The Thrace of Ares during the sixth and seventh centuries," *BF* 14 (1989), 221–35.
- Gorelik, Mikhail V., "Arms and armour in South-Eastern Europe in the second half of the first millennium AD," in *A Companion to Medieval Arms and Armour*, ed. D. Nicolle (Woodbridge, 2002), 127–47.
- Gorianov, B.T., "Slavianske poseleniia VI v. i ikh obshchestvennyi stroi," *Vestnik Drevnei Istorii*, no. 1 (1939), 308–18.
- Goriunov, E.A., "Selishche Celikov Bugor na Srednei Desne," *KSIA* 129 (1972), 42–46.
- Goriunov, E.A., *Rannie etapy istorii slavian Dneprovskogo Levoberezh'ia* (Leningrad, 1981a).
- Goriunov, E.A., "Slavianskoe poselenie serediny I tys. n.e. u s. Peschanoe Belgorodskoi oblasti," *KSIA* 171 (1981b), 61–65.
- Goriunov, E.A. and Michel Kazanski, "Do arkhologichnoi karty stochyshcha r. Poluzyr'ia," *ALLU*, nos. 1–2 (1998), 76–78.
- Goriunova, Valentina M., "Novyi klad antskogo vremeni iz srednego Podneprov'ia," *ArkhV* 1 (1992), 126–40.
- Goriunova, Valentina M., "Mogil'nik VI–VII vv. u s. Kartamyshevo Oboianskogo raion Kurskoi oblasti," in *Kul'turnye transformacii i vzaimovliianiia v Dneprovskom regione na iskhode rimskogo vremeni i v rannem Srednevekov'e. Doklady nauchnoi konferencii, posviashchennoi 60-letiiu so dnia rozhdeniia E.A. Goriunova (Sankt-Peterburg, 14–17 noiabria 2000 g.)*, eds. V.M. Goriunova and O.A. Shcheglova, Trudy Instituta istorii material'noi kul'tury 11 (St. Petersburg, 2004), 18–42.
- Goriunova, Valentina M. and Vlasta E. Rodinkova, "Rannelslavianskoe poselenie Velikie Budki (Khutor)," *Stratum+*, no. 4 (1999), 167–219.
- Gorodcov, Vasilii A., "Arkheologicheskiia izsledovaniia v okrestnostiakh g. Muroma v 1910 godu," *Drevnosti. Trudy Moskovskago Arkheologicheskago Obshchestva* 24 (1914), 40–216.
- Gorodcov, Vasilii A., "Podcheremskii klad," *SA*, no. 2 (1937), 113–50.
- Gotun, I.A. and Sergei A. Gorbanenko. "Zemlerobstvo zhyteliv slov'ians'kogo poselenia v uroch. Kozakiv iar u Khodosivtsi. In *Sclavenia terra* 1 (2016), pp. 153–71.
- Graca, Laura da, "Reflexiones metodológicas sobre el studio comparative de Chris Wickham," *Edad Media* 9 (2008), 265–97.
- Gračanin, Hrvoje, "Gepidi, Heruli, Langobardi i južna Panonija," *Scrinia slavonica* 7 (2007), 7–64.
- Gračanin, Hrvoje, "Kraj antike na hrvatskom prostorima," in *Nova zraka u europskom svjetlu. Hrvatske zemlje u ranome srednjem vijeku (oko 550-oko 1150)*, ed. Z. Nikolić Jakus, Biblioteka Povijest Hrvata, 1 (Zagreb, 2015), 37–70.
- Gračanin, Hrvoje and Nebojša Kartalija, "Neka razmatranja o gospodarstvu Zapadnog Ilirika od IV do VI stoljeća," *Acta illyrica* 2 (2018), 335–94.

- Graeber, David *Toward and Anthropological Theory of Value. The False Coin of Our Own Dreams* (New York, 2001).
- Grafenauer, Bogo, "Die Beziehungen der Slawen zu den Awaren und ihre wirtschaftlich-sozialen Grundlagen bis zur Belagerung von Konstantinopel (626)," in *Relazioni X Congresso Internazionale di Scienze Storiche, Roma, 4-11 settembre 1955* (Florence, 1955), 174-78.
- Graudonis, Jānis, "Izrakumi Lielupes krastā 1977. gadā," *ZAS* (1977), 41-44.
- Graudonis, Jānis, "Serpy i kosy II-IX vv. na territorii Latvii," in *Novoe v arheologii Pribaltiki i sosednikh territorii. Sbornik statei*, ed. J. Selirand (Tallinn, 1985), 24-35.
- Graudonis, Jānis, "The finery of the ancient Semigallians," *LA* 21 (2001), 55-62.
- Graudonis, Jānis, *Lielupes krastos pirms gadu simtiem. Arheoloģiskie pētījumi Jaunsvirlaukas pagastā* (Riga, 2003).
- Greatrex, Geoffrey, "Recent work on Procopius and the composition of Wars VIII," *BMGS* 27 (2003), 45-67.
- Gregory, Timothy E., "Diporto: an early Byzantine maritime settlement in the Gulf of Corinth," *Deltion tes christianikes archaiologikes hetaireias* 12 (1984), 287-304.
- Gregory, Timothy E., "An early Byzantine complex at Akra Sophia near Corinth," *Hesperia* 54 (1985), 411-28.
- Gregory, Timothy E., "An Early Byzantine (Dark-Age) settlement at Isthmia: preliminary report," in *The Corinthia in the Roman Period Including the Papers Given at a Symposium Held at the Ohio State University on 7-9 March, 1991*, ed. T.E. Gregory, *Journal of Roman Archaeology, Supplementary Series 8* (Ann Arbor, 1993a), 149-60.
- Gregory, Timothy E., *The Hexamilion and the Fortress, Isthmia 5* (Princeton, 1993b).
- Gregory, Timothy E., "Procopius on Greece," *AT* 8 (2000), 105-14.
- Gręzak, Anna, "Tierische Überreste aus der Siedlung in Tumiany (Säugetiere und Vögel)," in *Völkerwanderungszeitliche Siedlung von Tumiany (Daumen) im Kreise Allerstein*, ed. T. Baranowski, *Vetera et nova* 7 (Warsaw, 2017), 217-46.
- Griciuvienē, Eglē, *Sēliai. Baltų archeologijos paroda. Katalogas* (Vilnius/Riga, 2007).
- Griciuvienē, Eglē, Gytis Grižas, and Zane Buža, "Žiemgaliai V-XIII a.," in *Žiemgaliai. Baltų archeologijos paroda*, ed. E. Griciuvienē (Vilnius/Riga, 2005), 23-152.
- Grierson, Philip, "Commerce in the Dark Ages: a critique of the evidence," *Transactions of the Royal Historical Society* 5 (1959), 129-40.
- Grinchenko, V.A., "Pam'iatka VIII st. kolo s. Voznesenky na Zaporizhzhii," *Arkheolohiia*, no. 2 (1950), 37-63.
- Grishakov, Valerii V., Oleg V. Sedyshev and E.S. Liubimkina, "Nakhodki rannesrednevekovykh ritual'nykh lozhechek v Oksko-Sviiazhskom mezhdurech'e," *PV*, no. 1 (2016), 256-65.
- Grozdanova, Galina, "Relative chronology of the pottery of the early medieval Lower Danube Popina-Garvan archaeological group," *AB* 22, no. 3 (2018), 21-38.

- Gruszka, Bartłomiej, "Osada z najstarszej fazy wczesnego średniowiecza w Stożnem, stan. 2, pow. Zielona Góra," *Archeologia środkowego Nadodrza* 5 (2007), 299–327.
- Gruszka, Bartłomiej, "Obiekt z początków średniowiecza w Stożnem, stan. 2, pow. Zielonogórski," *SLAnt* 51 (2010), 227–67.
- Gruszka, Bartłomiej, "Materiały ceramiczne z początków wczesnego średniowiecza z Kalska (stan. 1), woj. lubuskie w świetle nowych ustaleń chronologicznych metodą termoluminescencyjną," *SLAnt* 52 (2011), 125–37.
- Gruszka, Bartłomiej, Ewa Pawlak, and Paweł Pawlak, "Zespoły ceramiczne ze starszych faz wczesnego średniowiecza na wybranych stanowiskach Środkowego Nadodrza w świetle najnowszych wyników datowań przyrodniczych," *APol* 58, nos. 1–2 (2013), 105–32.
- Gschwantler, Kurt, "Der Silbereimer von Kuczurmare—ein Meisterwerk frühbyzantinischer Toreutik," in *Syrien. Von den Aposteln zu den Kalifen*, ed. E.M. Ruprechtberger (Mainz, 1993), 175–79.
- Guga, Ștefan, *Sociologia istorică a lui Henri H. Stahl* (Cluj-Napoca, 2015).
- Guhr, Günther, "Das Wesen der militärische Demokratie bei Morgan sowie bei Marx und Engels," *EAZ* 25 (1984), 229–56.
- Guillou, André, "L'Istrie byzantine au VII<sup>e</sup> siècle: l'ancien et le nouveau dans le paysage rural," *Epeteris Kentrou Ereunes Historias Hellenikou Dikaiou tes Akademias Athenon* 45 (2014–2015), 181–88.
- Gulyás, Bence, "Újabb adatok a kora avar kori Tiszántúl kelet-európai kapcsolataihoz," in *Hadak útján XXIV. A népvándorlások fiatal kutatóinak XXIV. konferenciája. Esztergom, 2014. november 4–6.*, eds. Cs. Balogh and B. Major, vol. 1 (Budapest/Esztergom, 2015), 499–512.
- Gurevich, Aron Ia., "Post scriptum: *peasant society* i profesor Chris Wickham," in *Feodalizm: pontatiie i realii*, eds. A. Ia. Gurevich, S.I. Luchickoi, and P. Iu. Uvarova (Moscow, 2008), 260–77.
- Gurevich, Fryda D., *Drevnosti belorussskogo Poneman'ia* (Moscow, 1962).
- Gurin, Mikhail F., "Kazhan-Garadok—paselishcha prazhskoi kul'tury," *HAZ* 5 (1994), 152–63.
- Guruleva, Vera V., "Coins of Constans II struck in Cherson," in *IActs. XVIIIth International Congress of Byzantine Studies. Selected Papers: Moscow 1991*, eds. Ševčenko, G.G. Litavrin and W.K. Hanak, vol. 4, Byzantine Studies, Supplementum 1 (Shepherdstown, 1996), 252–57.
- Guslicer, B.I., A.F. Mel'nichuk and P. Iu. Pavlov, "Issledovaniia v Permskom Priural'e," in *Arkheologicheskie otkrytiia 1984 goda*, ed. V.P. Shilov (Moscow, 1986), 125–26.
- Guštin, Mitja, "Slovansko skeletno grobišče na ledini Nova tabla pri Murski Soboti," in *Srednji vek. Arheološki raziskave med Jadranskim morjem in Panonsko nižino*, ed. M. Guštin (Ljubljana, 2008), 53–57.

- Guštin, Mitja and Georg Tiefengraber, "Oblike in kronologija zgodnesrednjeveške lončanine na Novi tabli pri Murski Soboti," in *Zgodnji slovani. Zgodnesrednjeveška lončenina na obrobju vzhodnih Alp*, eds. M. Guštin (Ljubljana, 2002), 46–64.
- Guštin, Mitja and Alenka Tomaž, "Zatak kraj Lendave i srednjovjekovna ruralna naselja Prekmurja," in *Srednjovjekovna naselja u svjetlu arheoloških izvora. Zbornik radova drugog međunarodnog znanstvenog skupa srednjovjekovne arheologije Instituta za arheologiju Zagreb*, 2.–3. lipnja 2015., eds. T. Sekelj-Ivančan, T. Tkalčec, S. Krznar, and J. Belaj, Zbornik Instituta za Arheologiju 6 (Zagreb, 2017), 221–34.
- Gutsfeld, Andreas, "Olympia und seine zwei Leben in der Spätantike—vom panhel-lenischen Heiligtum zur Domäne," *Gymnasium* 120 (2013), 1–18.
- Gyulai, Ferenc, "Újabb eredmények a késő népvándorláskor archaeobotanikai kutatásában: magvak és tanulságok," in *Sötét idők falvai. 8–n. századi települések a Kárpát-medencében*, eds. B. Kolozsi and K.A. Szilágy, *Tempora obscura* 1 (Debrecen, 2011), 209–52.
- Hachulska-Ledwos, Renée, "Wczesnośredniowieczna osada w Nowej Hucie-Mogile," *MANH* 3 (1971), 7–210.
- Hachulska-Ledwos, Renée, "Materiały wczesnośredniowieczne ze stanowisk 17, 18 i 20 w Krakowie-Nowej Hucie (Pleszów)," *MANH* 10 (1986), 107–47.
- Hadži-Maneva, Maja, "Coin hoards from the late 6th and 7th century discovered in the Republic of Macedonia," in *Byzantine Coins in Central Europe Between the 5th and 10th Century. Proceedings from the Conference Organized by the Polish Academy of Arts and Sciences and the Institute of Archaeology of the University of Rzeszów under the Patronage of Union Académique Internationale (Programme No. 57 Moravia Magna)*, Kraków, 23–26 IV 2007, ed. M. Wołoszyn, *Moravia Magna, Seria Polona* 3 (Cracow, 2009a), 47–56.
- Hadži-Maneva, Maja, "Early Byzantine coin circulation in Macedonia Secunda," *Cercetări numismatice* 15 (2009b), 107–32.
- Hahn, Margrete, "The early Byzantine to modern periods," in *The Berbat-Limnes Archaeological Survey, 1988–1990*, ed. B. Wells, Skrifter utgivna av Svenska institutet 1 Athen 40 44 (Jonsered, 1996), 345–451.
- Hahn, Wolfgang R.O., *Moneta Imperii Byzantini*, Veröffentlichungen der Numismatischen Kommission 1 (Vienna, 1973a).
- Hahn, Wolfgang R.O., "Some remarks on the historical value of the sixth century Byzantine copper currency," *Journal of Numismatic Fine Arts* 1, no. 10 (1973b), 177–78.
- Hahn, Wolfgang R.O., *Moneta Imperii Byzantini. Von Justinus II. bis Phocas (565–610)*, Veröffentlichungen der Numismatischen Kommission 4 (Vienna, 1975).
- Hahn, Wolfgang R.O., "The numismatic history of Cherson in early Byzantine times. A survey," *Numismatic Circular* 86 (1978), 414–15, 471–72, and 521–22.



- Hahn, Wolfgang R.O., *Moneta Imperii Byzantini. Von Heraclius bis Leo III./Alleinregierung (610–720)*, Veröffentlichungen der Numismatischen Kommission 10 (Vienna, 1981).
- Hahn, Wolfgang R.O., *Money of the Incipient Byzantine Empire (Anastasius I–Justinian I, 491–565)*, Veröffentlichungen des Instituts für Numismatik und Geldgeschichte der Universität Wien 6 (Vienna, 2000).
- Haimovici, Sergiu, “Studiul materialului faunistic din așezările de la Cîrligi-Filipești (secolele II–V e. n.) și Izvoare Bahna (sec. VI–IX e.n.),” *Carpica* 16 (1984), 95–99.
- Haimovici, Sergiu, “Studiul materialului osteologic descoperit în două așezări subcarpatice datînd din secolele V–VII e.n.: Davideni și Ștefan cel Mare (jud. Bacău),” *Carpica* 18–19 (1986–1987), 251–60.
- Haimovici, Sergiu, “The study of the fauna remains from the lodgings in Borșeni ‘Bulgărie’ (Războieni, Neamț county), Vth–VIth centuries,” in *Studia antiqua et medievalia. Miscellanea in honorem annos LXXV peragentis Professoris Dan Gh. Teodor oblata*, ed. D. Aparaschivei, Honoraria 5 (Bucharest, 2009), pp. 185–96.
- Haimovici, Sergiu and Mihai Blăjan, “Studiul faunei din locuințele prefeudale (sec. V–VI e. n.) descoperite la Alba Iulia (1985, 1986 și 1988),” *Apulum* 26 (1989), 335–46.
- Haimovici, Sergiu and Leone Cărpuş, “Studiul paleofaunei din așezarea prefeudală de la Udești, jud. Suceava,” *Suceava* 9 (1982), 497–504.
- Hajnal, Zsuzsanna, “Keső antik jellegű kerámia a Kölked-Feketekapui avarkori telepről,” *CAH* (2005), 437–80.
- Hajnal, Zsuzsanna, “Gyorskorongolt kerámia a Kölked-feketekapui avar kori lelőhelyről. Technológiai-tipológiai vizsgálatok,” in “*Hadak útján. Népeségék és iparok a népvándorlás korában. A Népvándorlások Fiatal Kutatóinak XVI Konferenciája. Nagykovácsi, 2005. szeptember 26–28.*,” ed. Zs. Újlaki Pongrácz (Nagykovácsi, 2006), 121–137.
- Hajnal, Zsuzsanna, “Szentendre, Komitat Pest,” in *Die Langobarden. Das Ende der Völkerwanderungszeit. Katalog zur Ausstellung im Rheinischen Landesmuseum Bonn, 22.8.2008–11.1.2009*, ed. M. Hegewisch (Bonn/Darmstadt, 2008), 313–15.
- Hajnal, Zsuzsanna, “Házak a Kölked-Feketekapui avar kori telepen,” *AE* 134 (2009), 91–116.
- Hajnal, Zsuzsanna, “A Kölked-feketekapui ‘A’ és ‘B’ temetők együttes értékelése,” in *Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére*, ed. T. Vida (Budapest, 2012), 607–44.
- Hajnalová, Eva, “Archäobotanische Funde aus Krivina,” in *Iatrus-Krivina. Spätantike Befestigung und frühmittelalterliche Siedlung an der unteren Donau*, vol. 2 (Berlin, 1982), 207–35.
- Hajnalová, Eva, “Die archäobotanische Funde,” in *Iatrus-Krivina. Spätantike Befestigung und frühmittelalterliche Siedlung an der unteren Donau*, eds. G.v. Bülow and D. Schiefedecker, vol. 4 (Berlin, 1991), 261–98.

- Hajnalová, Eva and Jana Mihályiová, "Archeobotanické nálezy v roku 2000," in *Archeologické výskumy a nálezy na Slovensku v roku 2000*, ed. B. Chropovský (Nitra, 2001), 77–81.
- Haldon, John, *The State and the Tributary Mode of Production* (London/New York, 1993).
- Haldon, John, *Byzantium in the Seventh Century. The Transformation of a Culture*, 2nd edition (Cambridge, 1997).
- Haldon, John, "Production, distribution, and demand in the Byzantine world, c.660–840," in *The Long Eighth Century*, eds. I.L. Hansen and C. Wickham, *The Transformation of the Roman World 11* (Leiden/Boston, 2000), 225–64.
- Haldon, John, "Economy and administration. How did the empire work?" in *The Cambridge Companion to the Age of Justinian*, ed. M. Maas (Cambridge/New York, 2007), 28–59.
- Haldon, John, "Framing transformation, transforming the framework," *Millennium* 5 (2008), 327–51.
- Halecki, Oskar, *The Limits and Divisions of European History* (London/New York, 1950).
- Halecki, Oskar, *The Borderlands of Western Civilization. A History of East Central Europe* (New York, 1952).
- Halsall, Guy, *Barbarian Migrations and the Roman West, 376–568* (Cambridge/New York, 2007).
- Hânceanu, George Dan, "Ocupațiile comunităților autohtone din bazinul Bârladului (secolele VI–XI)," in *Arheologia mileniului I p. Chr. II. Interferențe culturale la Dunărea de Jos*, eds. L.M. Voicu and B. Ciupercă (Bucharest, 2011), 241–98.
- Handley, Mark A, "Two hundred and seventy-four addenda and corrigenda to the Prosopography of the Late Roman Empire from the Latin-speaking Balkans," *JLA* 3, no. 1 (2010), 113–57.
- Hann, C.M., "Introduction: the embeddedness of property," in *Property Relations. Renewing the Anthropological Tradition*, ed. C.M. Hann (Cambridge, 1998), 1–47.
- Hardt, Matthias, "Warlords bei den frühen Slawen?" in *Die frühen Slawen—von der Expansion zu gentes und nationes. Beiträge der Sektion zur slawischen Frühgeschichte des 8. Deutschen Archäologiekongresses in Berlin, 06.10. Oktober 2014. 1. Beiträge zum Schwerpunktthema*, eds. F. Biermann, Th. Kersting and A. Klammt, *Beiträge zur Ur- und Frühgeschichte Mitteleuropas 81.2* (Langenweissbach, 2016), 53–60.
- Harhoiu, Radu and Gheorghe Baltag, *Sighișoara- "Dealul Viilor". Monografie arheologică*, Muzeul Județean Bistrița-Năsăud. *Seria Historica* 14.1 (Cluj-Napoca, 2006).
- Hasaki, Eleni and Konstantinos T. Raptis, "Roman and Byzantine ceramic kilns in Greece (1st–15th c. CE). Continuities and changes in kiln typology and spatial organization of production," in *Archeologia delle produzioni ceramiche nel mondo antico. Spazi, prodotti, strumenti e tecniche. Atti del convegno (Genova, 1–2 dicembre 2014)*, eds. N. Cucuzza, B.M. Giannattasio, and S. Pallecchi, *Quaderni di archeologia—Genova* 1 (Ariccia, 2016), 209–29.

- Hattersley-Smith, Kara, "Byzantine Public Architecture, Between the Fourth and the Early Seventh Centuries A.D., with Special Reference to the Towns of Macedonia," Ph.D. Dissertation, University of Oxford (Oxford, 1988).
- Haussig, Hans Wilhelm, "Theophylakts Exkurs über die skythischen Völker," *Byzantion* 23 (1953), 275–462.
- Hayashi, Tadayuki, "Masaryk's 'zone of small nations' in his discourse during World War I," *Acta Slavica Iaponica* 15 (2008), 3–20.
- Hayden, Brian, "Pathways to power. Principles for creating socioeconomic inequalities," in *Foundations of Social Inequality*, eds. T.D. Price and G.M. Feinman (New York/London, 1995), 16–86.
- Hayes, John W. *Excavations at Saraçhane in Istanbul* (Princeton, 1992).
- Hayes, John W. and Platon Petridis, "Rapports régionaux: Grèce," in *70 Diethnes Synedrio Mesaionikes Keramikes tes Mesogeiou. Thessalonike, 11–16 oktobriou 1999. Praktika*, ed. Ch. Bakirtzis (Athens, 2003), 529–36.
- Heath, Sebastian, Joseph L. Rife, Joge J. Bravo, and Gavin Blasdel "Preliminary report on early Byzantine pottery from a building complex at Kenchreai (Greece)," *ISAW Papers* 10 (2015), 1–23.
- Heather, Peter, *Empires and Barbarians. The Fall of Rome and the Birth of Europe* (Oxford, 2009).
- Hegewisch, Morten, "Brno-Kotlářská, Bez. Brno-město," in *Die Langobarden. Das Ende der Völkerwanderungszeit. Katalog zur Ausstellung im Rheinischen Landesmuseum Bonn, 22.8.2008–11.1.2009*, ed. M. Hegewisch (Bonn/Darmstadt, 2008), 256–57.
- Hegmon, Michelle, "Setting theoretical egos aside: issues and theory in North American archaeology," *American Antiquity* 68, no. 2 (2003), 213–43.
- Heinrich-Tamáška, Orsolya, "Megjegyzések a kora avar kori ötvösművészethez a fogazással díszített leletek kapcsán," *MFAMESA* 8 (2002), 245–82.
- Heinrich-Tamáška, Orsolya, *Studien zu den awarenzeitlichen Tauschierarbeiten*, Monographien zur Frühgeschichte und Mittelalterarchäologie 11 (Innsbruck, 2005a).
- Heinrich-Tamáška, Orsolya, "További adatok a fogazással díszített leletek készítési módjához: a konstrukció," *MFAMESA* 11 (2005b), 147–88.
- Heinrich-Tamáška, Orsolya, *Die Stein- und Glasinkrustationskunst des 6. und 7. Jahrhunderts im Karpatenbecken*, Monumenta Avarorum Archaeologica 8 (Budapest, 2006).
- Heinrich-Tamáška, Orsolya, "Avar-age metalworking technologies in the Carpathian Basin (sixth to eighth century)," in *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars, and Cumans*, ed. F. Curta, East Central and Eastern Europe in the Middle Ages, 450–1450 2 (Leiden/Boston, 2008), 237–61.
- Heinrich-Tamáška, Orsolya, "Frühe 'Awarinnen' und späte 'Germanninen'? Bemerkungen zur Interpretation reicher Frauengräber der Frühawarenzeit," in *Weibliche Eliten in der Frühgeschichte. Internationale Tagung vom 13. bis zum 14. Juni 2008 im RGZM*

- im Rahmen des Forschungsschwerpunktes "Eliten"*, ed. D. Quast, RGZM-Tagungen 10 (Mainz, 2011), 89–110.
- Heinrich-Tamáška, Orsolya, "Finds decorated with garnets from Early Avar contexts in the light of their cell techniques." in *Verborgenes Wissen. Innovation und Transformation feinschmiedetechnischer Entwicklungen im diachronen Vergleich*, eds. B. Regine Armbruster, H. Elbracht, O. Hahn and O. Heinrich-Tamáška, Berlin Studies of the Ancient World 35 (Berlin, 2016), 183–220.
- Heinrich-Tamáška, Orsolya and Hans-Ulrich Voß, "Goldene Pseudoschnallengürtel in der Avaria (7. Jh. n. Chr.): Studien zu Konstruktion, Herstellungs- und Verzierungstechniken sowie zum Material," in *Über den Glanz des Goldes und die Polychromie. Technische Vielfalt und kulturelle Bedeutung vor- und frühgeschichtlicher Metallarbeiten. Akten des 2. und 3. Workshops des Netzwerks Archäologisch-Historisches Metallhandwerk in Frankfurt am Main, 24.–27. 10. 2013 und in Berlin, 11.–12. 05. 2017*, eds. H. Eilbracht et al., Kolloquien zur Vor- und Frühgeschichte 24 (Bonn, 2018), 125–252.
- Heinrich-Tamáška, Orsolya, Eszter Horváth, and Zsolt Bendő. "Before or after AD 568? Technological observations on the gold objects from grave 2 at Keszthely-Fenéki Street," in *Über den Glanz des Goldes und die Polychromie. Technische Vielfalt und kulturelle Bedeutung vor- und frühgeschichtlicher Metallarbeiten. Akten des 2. und 3. Workshops des Netzwerks Archäologisch-Historisches Metallhandwerk in Frankfurt am Main, 24.–27. 10. 2013 und in Berlin, 11.–12. 05. 2017*, ed. H. Eilbracht et al., Kolloquien zur Vor- und Frühgeschichte 24 (Bonn, 2018), 313–50.
- Heinsalu, Atko and Siim Veski, "Palaeoecological evidence of agricultural activity and human impact on the environment at the ancient settlement centre of Keava, Estonia," *Estonian Journal of Earth Sciences* 59, no. 1 (2010), 80–89.
- Hendy, Michael F., *Studies in the Byzantine Monetary Economy c. 300–1450* (Cambridge, 1985).
- Henning, Joachim, "Bulgarien zwischen Antike und Mittelalter im Spiegel der Wirtschaftsarchäologie," *Das Altertum* 32, no. 2 (1986), 100–12.
- Henning, Joachim, "Eisenverarbeitungswerkstätten in unteren Donaugebiet zwischen Spätantike und Frühmittelalter," *ZfA* 21 (1987), 59–73.
- Henning, Joachim, *Südosteuropa zwischen Antike und Mittelalter. Archäologische Beiträge zur Landwirtschaft des I. Jahrtausends u. Z.*, Schriften zur Ur- und Frühgeschichte 42 (Berlin, 1987).
- Henning, Joachim, "Die ländliche Besiedlung im Umland von Sadovec, Nordbulgarien (Vit-Tal) und die römischen Agrarstrukturen im europäischen Vorland von Byzanz (Thrakien/Niedermösien)," in *Ländliche Besiedlung und Landwirtschaft in den Rhein-Donau-Provinzen des Römischen Reiches. Vorträge eines Internationalen*

- Kolloquiums vom 16.–21. April 1991 in Passau*, eds. H. Bender and H. Woff, Passauer Universitätschriften zur Archäologie 2 (Espelkamp, 1994), 463–503.
- Hensel, Zdzisław, “Elementy rządów końskich z cmentarzyska w Tumianach, woj. olsztyńskie w świetle badań składu chemicznego,” *APol* 41 (1996), 131–38.
- Herold, Hajnalka, “Materielle Kultur, technologische Traditionen, Identität. Untersuchungen zur Archäologie des Frühmittelalters in Niederösterreich,” *Zeitschrift für Archäologie des Mittelalters* 37 (2009), pp. 11–34.
- Herold, Hajnalka, “Insights into the chronology and economy of the Avar Khaganate and the post-Avar period: pottery production and use in the Carpathian Basin from the late 6th to the 10th century AD,” *AAC* 49 (2014), 207–29.
- Herrmann, J.J., V. Barbin, Aristotelis Mentzos, and R. Reed, “Architectural decoration and marble from Thasos: Macedonia, central Greece, Campania, and Provence,” in *ASMOSIA 6. Interdisciplinary Studies on Ancient Stone. Proceedings of the Sixth International Conference of the Association for the Study of Marble and Other Stones in Antiquity, Venice, June 15–18, 2000*, ed. L. Lazzarini (Padova, 2002), 316–27.
- Herrmann, Joachim. “Militärische Demokratie und die Übergangsperiode zur Klassengesellschaft,” *EAZ* 23 (1982), 11–31.
- Herrmann, Joachim, “Getreidekultur, Bockteller und Brot-Indizien frühslawischer Differenzierung,” in *Zbornik posveten na Boshko Babich. Mélange Boško Babić 1924–1984*, ed. M. Apostolski (Prilep, 1986), 267–72.
- Herrmann, Joachim. “Militärische Demokratie und Allodismus in Mitteleuropa zwischen Antike und Feudalgesellschaft,” *EAZ* 28 (1987), 257–67.
- Herskovits, Melville J., *The Economic Life of Primitive People* (New York/London, 1940).
- Heydeck, J., “Das Gräberfeld von Daumen und Rückblick auf einer deutsch-nationalen Kunst,” *Sitzungsberichte der Altertumsgesellschaft Prussia* 49–50 (1895), 65–94.
- Hidri, Sali, “Materiale arkeologijke nga bazilika e Arapajt,” *Iliria* 21, nos. 1–2 (1991), 203–18.
- Hilberg, Volker, “Die westbaltischen Stämme und die überregionale Kulturaustausch in der Ostseeregion zur Merowingerzeit,” *Bodendenkmalpflege in Mecklenburg-Vorpommern: Jahrbuch* 51 (2003), 295–319.
- Hilberg, Volker, *Masurische Bügelfibeln. Studien zu den Fernbeziehungen der völkerwanderungszeitlichen Brandgräberfelder von Daumen und Kellaren*, Schriften des Archäologischen Landesmuseums 9.2 (Neumünster, 2009).
- Hinada, Shizuma, “On the meaning in our time of the drafts of Marx’s letter to Vera Zasulich (1881): with textual criticism,” *Slavic Studies* 20 (1975), 69–80.
- Hipp, Sylvia, “Veränderungen der Landschaft am westlichen Ende des Balatons von der Römerzeit bis zur Karolingerzeit,” in *Keszthely-Fenékpuszta im Spiegel der Jahrtausende. Ausstellung, Balatoni Múzeum, 4. Oktober 2009.–31. Mai 2010*, eds. O. Heinrich-Tamácska and P. Straub (Leipzig/Zalaegerszeg, 2009), 26–30.

- Hirth, Kenneth G., "The distributional approach: a new way to identify marketplace exchange in the archaeological record," *Current Anthropology* 39 (1998), 451–67.
- Hirth, Kenneth G., "Finding the mark in the marketplace: the organization, development, and archaeological identification of market systems," in *Archaeological Approaches to Market Exchange in Ancient Societies*, eds. C.P. Garraty and B.L. Stark (Boulder, 2010), 227–47.
- Hjohlman, Jenni, Arto Penttinen, and Berit Wells, *Pyrgouthi. A Rural Site in the Berbati Valley from the Early Iron Age to Late Antiquity. Excavations by the Swedish Institute at Athens, 1995 and 1997*, Skrifter utgivna av Svenska institutet i Athen 40 52 (Stockholm, 2005).
- Hodža, Milan, *Federation in Central Europe. Reflections and Reminiscences* (London/ New York, 1942).
- Hoebel, E. Adamson, *The Law of Primitive Man. A Study in Comparative Legal Dynamics* (Cambridge, Mass, 1954).
- Homza, Martin, "A few words about the identity of the Slavs, yesterday, today, and tomorrow," *Studia Slavica et Balcanica Petropolitana*, no. 1 (2018), 3–41.
- Honeychurch, William and Cheryl A. Makarewicz, "The archaeology of pastoral nomadism," *ARA* 45 (2016), 341–59.
- Honigmann, Ernst. *Die sieben Klimata und die polis episemoi* (Heidelberg, 1929).
- Horedt, Kurt, *Contribuții la istoria Transilvaniei în secolele IV–XIII*, Biblioteca istorică 7 (Bucharest, 1958).
- Horedt, Kurt, "Așezarea fortificată de la Șeica Mică (r. Mediaș)," *SCIIV* 15, no. 2 (1964), 187–204.
- Horedt, Kurt, *Morești. Grabungen in einer vor- und frühgeschichtlichen Siedlung in Siebenbürgen* (Bucharest, 1979).
- Horváth, Ernő, "A környei népvándorlaskori temető növénymaradványai," *Savaria. A Vas megye múzeumok értesítője* 13–14 (1979–1980), 11–28.
- Horváth, Eszter, "Cloisonné jewellery from the Langobardic Pannonia: technological evidence of workshop practice," in *The Pontic-Danubian Realm in the Period of the Great Migration*, eds. V. Ivanišević and M. Kazanski, Monographies du Centre de recherche d'histoire et civilisation byzantine 36 (Paris/Belgrade, 2012), 207–42.
- Horváth, M. Attila, "Kagán vagy nem kagán? Érvek és ellenérvek—újabb adatok egy 'lefokozott kagán' védelmében," in *Hatalmi központok az avar kaganátusban*, eds. Cs. Balogh, J. Szentpéteri and E. Wicker (Kecskemét, 2019), 47–68.
- Howard-Johnston, James D., "Urban continuity in the Balkans in the early Middle Ages," in *Ancient Bulgaria. Papers presented to the International Symposium on the Ancient History and Archaeology of Bulgaria, University of Nottingham, 1981*, ed. A.G. Poulter, vol. 2, Monograph Series 1 (Nottingham, 1983), 242–54.

- Hurbanič, Martin, "Byzancia a avarský kaganát v rokoch 623–624," *HC* 55, no. 2 (2007), 229–48.
- Hurbanič, Martin, "The nomads at the gates: some notes on the use of siege artillery by the Avars (from the first attack on Sirmium to the siege of Constantinople)," in *The Cultural and Historical Heritage of Vojvodina in the Context of Classical and Medieval Studies*, ed. Dj. Hardi, Monografije (Univerzitet u Novom Sadu. Filozofski fakultet) 61 (Novi Sad, 2015), 75–90.
- Hurbanič, Martin, "Vpády Avarov na Balkánske územia východorímskej ríše v rokoch 582–626," *HC* 63, no. 3 (2015), 387–404.
- Hurbanič, Martin, *Konstantinopol 626. Poslední bitva antiky* (Prague, 2016).
- Hurbanič, Martin, *The Avar Siege of Constantinople. History and Legend* (Cham, 2019).
- Husár, Martin, Peter Ivanič, and Martin Hetényi, "Podobnosti a odlišnosti vývoja na území súčasného Slovenska a Macedónska v 6.–12. storočí (historická a archeologická analýza)," in *Macedonské-slovenské literárne, kultúrne a jazykové vzťahy*, eds. M. Jakimovska-Tošić, Z. Taneski and M. Zajíčková (Nitra, 2015), 65–78.
- Iakobson, Anatolii L., *Srednevekovi Krym. Očerki istorii i istorii material'noi kul'tury* (Leningrad, 1964).
- Iankov, Dimităr, "Stara Zagora s VI do XI veka" in *Trudy V Mezhdunarodnogo Kongressa slavianskoi arkheologii, Kiev 18–25 sentiabria 1985 g.*, ed. B.A. Rybakov vol. 3 (Moscow, 1987), 113–18.
- Iashaeva, Tat'iana I., "On the immediate hinterland of Cherson in Late Antiquity and early medieval times," *Ancient West & East* 2, no. 1 (2003), 117–33.
- Iashaeva, Tat'iana I., Elena Denisova, Nataliia Gin'kut, Vera N. Zalesskaia and Denis V. Zhuravlev, *Nasledie vizantiiskogo Khersona* (Sevastopil'/Austin, 2011).
- Iatrou, S., "Mia paraterese schetike me te chronologese tes 1 avaroslabikes poliorkias tes Thessalonikes," *Byzantiaka* 28 (2009), 115–30.
- Ignat'eva, Oksana, "Termin 'Permskii zverinyi stil' v istoriograficheskom aspekte," *Finno-Ugrica* 10 (2007), 99–111.
- Ignatov, L.A., "Obrazcy drevnego iskusstva iz s. Iagkedzh (verkhniaia Vychegda)," in *Dukhovnaia kul'tura. Problemy i tendencii razvitiia. Vserossiiskaia nauchnaia konferenciia, 11–14 maia 1994 g. Tezisy dokladov*, ed. L.A. Maksimova, vol. 3 (Syktyvkar, 1994), 10–12.
- Iliadi, Amalia K. *Ta "thaumata" tou Agiou Demetriou hos istorikes peges. Epidromes kai slabikes epaikiseis enteuthen tou Dounabeos* (Trikala, 2003).
- Il'ins'ka, V.A., "O pamiatnikakh serediny I tysiacheletii n.e. v Dneprovskoi levoberezhnoi lesostepi," in *Slaviane i Rus'. Sbornik statei. K shestdesiatiletiu akad. B.A. Rybakova*, eds. E.I. Krupnov et al. (Moscow, 1968), 55–60.
- Iluk, Jerzy, "Bałtycki epizod wczesnobizantyskich dziejów. Znaleziska solidów na Pomorzu Nadwiślańskim z V–VI wieku," in *Gdańsk średniowieczny w świetle*

- najnowszych badań archeologicznych i historycznych*, ed. H. Paner (Gdańsk, 1998), 51–63.
- Iordanov, Ivan, “Bronzov prăsten pečat (V–VI v.) ot kaletu do selo Kovachevec,” in *Popovo v minaloto. Sbornik materiali ot nauchna konferenciia, provedena v grad Popovo na 10 iuni 1993 godina*, ed. D. Ovcharov (Varna, 1994), 22–27.
- Iordanov, Ivan, *Gradove, kreposti i selishta v srednevekovna Bălgariia spored dannite na sfragistika (izbrani stai i studii)* (Shumen, 2014).
- Iordanov, Ivan, “Monogramite vărkuhu zlatnite prăsteni na patriciia Kubrat (635–665),” in *In honorem professoris Stanislav Stanilov ad multos annos*, eds. B. Petrunova, A. Aladzhov and V. Grigorov (Sofia, 2016), 117–25.
- Iotov, Valeri, “Bronzova matrica za aplikacii ot kăсноantichnata krepost do s. Onogur, Dobrichko,” *Arkheologiia* 39 (1998), 72–4.
- Iotov, Valeri, “Ergasteriia nachala VII v. V vizantiiskoi kreposti na myse Sv. Atanas v gorode Biala, Varnenskoii oblasti (predvaritel’noe soobshchenie),” *Narteks. Byzantina Ukrainiensis* 2 (2013), 426–39.
- Iotov, Valeri, “Vinogradarstvo i vinodelie perioda pozdnei antichnosti i srednevekov’ia—na primere pis’mennykh istochnikov i arkheologicheskikh pamiatnikov Bolgarii,” *Arkheologiia evraziiskikh stepei* 4 (2018), 226–37.
- Iotov, Valeri and Aleksandăr Kharizanov, “Pesht za stroitelna keramika (VI v.) na iuzhniia briag na zaliva Sv. Atanas krai Biala, Varnensko,” *Dobrudzha* 32 (2017), 487–96.
- Ippen, Theodor, “Denkmäler verschiedener Altersstufen in Albanien,” *WMBH* 10 (1907), 3–70.
- Irimia, Mihai, “Cuptoarele romano-bizantine de ars ceramică de la Oltina (jud. Constanța),” *Pontica* 1 (1968), 379–408.
- Irimia, Mihai, “Fibulă cu inscripție din zona Izvoarele (com. Lipnița, jud. Constanța),” *Peuce* 3–4 (2005–2006), 251–58.
- Irscher, Johannes, “Makedonien im Zeitalter Justinians,” *Zeitschrift für Geschichtswissenschaft* 41, no. 12 (1993), 1079–84.
- Isaenko, V.F., A.G. Mitrofanov, and Georgii V. Shtykhov, *Ocherki po arkheologii Belorussii. Chast’ I* (Minsk, 1970).
- Islanova, Inna V., “Pogrebal’nye pamiatniki kul’tury dlinnykh kurganov verkhov’ev Msty i Volchiny,” in *Pamiatniki zheleznogo veka i srednevekov’ia na Verkhnei Volge i Verkhnem Podvin’e*, ed. V.V. Sedov (Kalinin, 1989), 24–32.
- Islanova, Inna V., *Udomel’skoe Poozer’e v epokhu zheleza i rannego srednevekov’ia* (Moscow, 1997).
- Islanova, Inna V., *Drevnosti v verkhov’iakh Volgi (rannii zheleznyi vek i rannee srednevekov’e)*, *Rannelslavianskii mir* 14 (Moscow, 2012).
- Islanova, Inna V., “Rannesrednevekovye poseleniia tipa Podol v verkhov’iakh Volgi,” *KSIIA* 228 (2013), 199–208.



- Islanova, Inna V., "Rannesrednevekoveye gruppy pamiatnikov na Severo-Zapade Vostochnoi Evropy," in *Rannesrednevekoveye drevnosti lesnoi zony Vostochnoi Evropy (V–VII vv.)*, eds. A.M. Oblomskii and I.V. Islanova (Moscow, 2016), 136–220.
- Islanova, Inna V., "O kul'turnykh transformatsiakh rannesrednevekovykh drevnostei na Volgo-Baltiiskom vodorazdele," in *Evropa ot Latena do Srednevekov'ia. Varvarkii mir i rozhdienie slavianskikh kul'tur. K 60-letiiu A.M. Oblomskogo*, eds. V.E. Rodinkova and O.S. Rumianceva (Moscow, 2017), 82–89.
- Islanova, Inna V. and A.V. Mireckii, "Nakhodki s gorodishcha Osechen," *Tver, Tverskaia zemlia i sopredel'nye territorii v epokhu srednevekov'ia* 2 (1997), 12–20.
- Islanova, Inna V., A.V. Mireckii, and O.M. Oleinikov, "Gorodishche Osechen (rannii zheleznyi vek i rannee srednevekov'e)," *TAS* 6, no. 2 (2007), 132–46.
- Istvánovits, Eszter, "Korai szláv települes maradványai Kiskvárd határában," *JAME* 43 (2001), 165–83.
- Iurukova, Iordanka, "Parichno-stokovite otnosheniia v bălgarskite zemi prez prekhodniia period," *Numizmatika* 10, nos. 2–3 (1976), 3–10.
- Iurukova, Iordanka, "Un trésor de monnaies d'or byzantines du VII-e siècle découvert à Nessèbre," in *Nessèbre*, ed. T. Ivanov, vol. 2 (Sofia, 1980), 186–90.
- Iushkova, M.A., "North-western Russia before its settling by Slavs (8th century BC–8th century AD)," in *The Slavization of the Russian North. Mechanisms and Chronology*, ed. J. Nuorluoto, *Slavica Helsingiensia* 27 (Helsinki, 2006), 141–54.
- Iutina, Tat'iana K., "Istoriia formirovaniia iuzhnykh udmurtov v epokhu srednevekov'ia (etnogenez, sladyvanie khoziaistvenno-kul'turnogo kruga)," in *Congressus primus historiae Fenno-Ugricae*, ed. K. Julku, vol. 1 (Oulu, 1996), 439–47.
- Ivančan, Tajana Sekelj. *Podravina u ranom srednjem vijeku. Rezultati arheoloških istraživanja ranosrednjovjekovnih nalazišta u Torčecu*, Monographiae Instituti Archaeologici 2 (Zagreb, 2010).
- Ivanišević, Vujadin, "Caričin Grad—the fortifications and the intramural housing in the Lower Town," in *Byzanz—das Römerreich im Mittelalter. Teil 2, 2. Schauplätze*, eds. F. Daim and J. Drauschke, *Monographien des Römisch-Germanischen Zentralmuseums* 84 (Mainz, 2010), 747–78.
- Ivanišević, Vujadin, "Late antique cities and their environment in Northern Illyricum," in *Hinter den Mauern und auf dem offenen Land. Leben im Byzantinischen Reich*, eds. F. Daim and J. Drauschke, *Byzanz zwischen Orient und Okzident*, 3 (Heidelberg, 2017), 89–99.
- Ivanišević, Vujadin, "Metal workshops of Caričin Grad (Justiniana Prima)," in *Lebenswelten zwischen Archäologie und Geschichte. Festschrift für Falko Daim zu seinem 65. Geburtstag*, J. Drauschke et al., *Monographien der Römisch-Germanischen Zentralmuseums*, 150.1 (Mainz, 2018), 711–24.

- Ivanišević, Vujadin and Ivan Bugarski, "Transformation of burial space in the cities of northern Illyricum during the Late Antiquity," *Antaeus* 35–36 (2018), 91–118.
- Ivanišević, Vujadin, and Ivan Bugarski, "Post-Antique Settlement Patterns in the Central Balkans: Use of Justinianic Landscapes in the Early Middle Ages," in *Mediterranean Landscapes in Post Antiquity. New Frontiers and New Perspectives*, ed. S. Gelichi and L. Olmo-Enciso (Oxford, 2019), 7–17.
- Ivanišević, Vujadin and Michel Kazanski, "La nécropole de l'époque des grandes migrations à Singidunum," in *Singidunum* 3, ed. M. Popović (Belgrade, 2002), 101–57.
- Ivanišević, Vujadin and Michel Kazanski, "Geruly Iustiniana v Severnom Illirikume i ikh arheologicheskie sledy," *Stratum+*, no. 5 (2010), 141–57.
- Ivanišević, Vujadin and Pavle Popović, "Les monnaies protobyzantines en Pannonie seconde," in *Sirmium à l'époque des grandes migrations*, eds. I. Popović, M. Kazanski and V. Ivanišević, Monographies du Centre de recherche d'histoire et civilisation de Byzance 53 (Leuven/Paris/Bristol, 2017), 239–54.
- Ivanišević, Vujadin and Sonja Stamenković, "Glass' workshop from Caričin Grad (Iustiniana Prima)," in *Glass Along the Silk Road from 200 BC to AD 1000. International Conference Within the Scope of the "Sino-German Project on Cultural Heritage Preservation" of the RGZM and the Shaanxi Provincial Institute of Archaeology, December 11th–12th 2008*, ed. B. Zorn, RGZM Tagungen 9 (Mainz, 2010), 39–52.
- Ivanišević, Vujadin, Michel Kazanski, and Anna V. Mastykova, *Les nécropoles de Viminacium à l'époque des Grandes Migrations*, Monographies du Centre de recherche d'histoire et civilisation de Byzance 22 (Paris, 2006).
- Ivanov, A.G., *Etnokul'turnye i ekonomicheskie svyazi naseleniia basseina r. Chepcy v epokhu srednevekov'ia (konec V-pervaia polovina XIII v.)* (Izhevsk, 1998).
- Ivanov, P., "Avarski nakhodki ot Severozapadna Bălgariia," *PPIK* 3 (1997), 272–82.
- Ivanov, Sergei A., "Prokopii o slavianskom 'obrazе zhizni,'" in *Antichnaia balkanistika. Karpato-balkanskii region v diakhronii. Predvaritel'nye materialy k mezhdunarodnomu simpoziumu* (Moscow, 1984), 14–15.
- Ivanov, Sergei A., "The Avar-Byzantine wars of the late sixth century as depicted by Nikephoros Kallistos Xanthopoulos: a new source?" *ZRVI* 50 (2013), pp. 123–48.
- Ivanov, Sergei A., L.A. Gindin and V.L. Cymburskii, "Prokopii Kesariiskii," in *Svod drevneishikh pis'mennykh izvestii o slavianakh*, eds. L.A. Gindin, S.A. Ivanov and G.G. Litavrin, vol. 1 (Moscow, 1991), 170–249.
- Ivanova, O. V., "Chudesa Sv. Dimitriia Solunskogo," in *Svod drevneishikh pis'mennykh izvestii o slavianakh*, eds. S.A. Ivanov, G.G. Litavrin and V.K. Ronin, vol. 2 (Moscow, 1995), 91–211.
- Ivanovski, Milan, "Rajčnica. Ranosrednjovekovna nekropola," *Arheološki pregled* (1986), 124.

- Ivashchenko, Iulia, "Les ateliers de céramique du VI<sup>e</sup> au XV<sup>e</sup> s. au nord de la Mer Noire: la problématique de la continuité," in *La céramique médiévale en Méditerranée. Actes du congrès de l'AIECM 2, Aix-en-Provence, 13–18 novembre 1995*, ed. G. Démians d'Archimbaud (Aix-en-Provence, 1997), 73–85.
- Iverson, Eric A., "Burial and urbanism at Late Antique and Early Byzantine Corinth (c. AD 400–700)," in *Towns in Transition. Urban Evolution in Late Antiquity and the Early Middle Ages*, eds. N. Christie and S.T. Loseby (Hants, 1996), 99–125.
- Izdebski, Adam, "The Slavs' political institutions and the Byzantine policies (ca. 530–650)," *Byzantinoslavica* 59, nos. 1–2 (2011), 50–69.
- Jacobi, Frauke, Marcus Stecher, Stephanie Zesch, Vladimir Radokhin and Kurt W. Alt, "Eski Kermen, Almalyk und Lučistoe—Bioarchäologie auf der Krim," in *Die Höhensiedlungen im Bergland der Krim. Umwelt, Kulturaustausch und Transformation am Nordrand des Byzantinischen Reiches*, eds. S. Albrecht, F. Daim and M. Herdick, Monographien des Römisch-Germanischen Zentralmuseums 113 (Mainz, 2013), 335–60.
- Jagodziński, Marek F., *Archeologiczne ślady osadnictwa między Wisłą a Pastęką we wczesnym średniowieczu. Katalog stanowisk*, Adalbertus 3 (Warsaw, 1997).
- Jakobson, Felix, *Die Brandgräberfelder von Daumen und Kellaren im Kreise Allenstein, Ostpr.*, Schriften des Archäologischen Landesmuseums 9.1 (Neumünster, 2009).
- Janković, Đorđe, Vāzharova, Zhivka, "Le site d'habitation médiéval Kula près du village Mihajlovac," *DS* 3 (1986), 443–46.
- Janković, Đorđe, "Tragovi Romeja u slovenskom naselju Kula," in *Zbornik posveten na Boshko Babich. Mélange Boško Babić 1924–1984*, ed. M. Apostolski (Prilep, 1986), 105–07.
- Janković, Đorđe, *Srpsko Pomorje od 7. do 10. Stoleća*, Povremena izdanja 5 (Belgrade, 2007).
- Jánoska, Péter, "Avar kori fémleletek kezelésénél szerzett tapasztalatok," *VMMK* 16 (1982), 441–48.
- Jastrzębowska, Elżbieta, "Chersonèse dans l'antiquité tardive. Etat des recherches et bibliographie," *AT* 9 (2001), 399–418.
- Jazdzewski, Konrad, "Problematyka i potrzeby badań nad V–VII wiekiem," *APol* 13 (1968), 277–98.
- Jędrzejewska, Sylwia, "Początki wczesnośredniowiecznej kultury słowian i problem ich praojczyzny w polskich badaniach archeologicznych. Rys historyczny," in *Od Bachórze do Światowida ze Zbrucza. Tworzenie się słowiańskiej Europy w ujęciu źródłoznawczym. Księga jubileuszowa Profesora Michała Parczewskiego*, eds. B. Chudzińska, M. Wojenka, and M. Wołoszyn (Cracow/Rzeszów, 2016), 25–40.
- Jeffreys, Elizabeth M., "Malalas' sources," in *Studies in John Malalas*, eds. E.M. Jeffreys, B. Croke and S. Roger (Sydney, 1990), 167–216.

- Jelínková, Dagmar, "Obytné objekty s keramikou pražského typu z Mušova," *AR* 32 (1980), 413–34 and 480.
- Jelínková, Dagmar, "Doplňky k mapě nalezišť s keramikou pražského typu na Moravě," *PA* 76/2 (1985), 456–73.
- Jelínková, Dagmar, Vladimír Šrein, and Martin Šťastný, "Doklady slévačství neželezných kovů v kultuře s keramikou pražského typu na Moravě," in *Mezi raným a vrcholným středověkem. Pavlu Kouřilovi k šedesátým narozeninám přátelé, kolegové a žáci*, eds. J. Doležel and M. Wihoda (Brno, 2012), 69–90.
- Jeremić, Miroslav, "The Caričin Grad necropolis," *Starinar* 45–46 (1994–1995), 181–95.
- Ježek, Martin, "The disappearance of European smiths' burials," *Cambridge Archaeological Journal* 25, no. 1 (2015), 121–43.
- Jovaiša, Eugenijus, "Baltų visuomenė ankstyvąją viduramžių pradžioje (V–VI a.)," *Istorija* 64, no. 6 (2006), 5–16.
- Jović Gazić, Vedrana, "Urban development from Late Antiquity to the Middle Ages: Dubrovnik, Split, Trogir, Zadar. The state of research," *Archaeologia Adriatica* 5 (2011), 151–96.
- Jurčević, Ante, "Kasnoantičko i srednjovjekovno groblje na lokalitetu Crkvine u Klapavicama," *SP* 34 (2007), 249–65.
- Jurković, Miljenko, "Some aspects of continuity and discontinuity between Late Antiquity and the early Middle Ages in Dalmatia," in *Predci i predtechki mitove i utopii na Balkanite*, ed. Iliia Konev (Blagoevgrad, 1997), 415–26.
- Kaczkowski, Mieczysław, "Charakterystyka osadnictwa wczesnośredniowiecznego w rejonie Głogówa od połowy V do połowy XI wieku w świetle źródeł archeologicznych," *Zielonogórskie Zeszyty Muzealne* 2 (1971), 5–37.
- Kaczyński, Marian, "Materiały z badań 1934 r. na cmentarzysku kurhanowym w miejscowości Sudata, pow. Świeciany, na Wilenszczyźnie," *WA* 29 (1963), 138–56.
- Kaczyński, Marian, "Cmentarzysko z V–VI w. we wsi Wołownia, pow. Suwałki," *RoB* 6 (1965), 167–207.
- Kada, Elek, "Gátéri (kun-kisszállási) temető a régibb középkorból," *AE* 25 (1905), 360–84 and 402–07.
- Kahn, Jennifer G., "Anthropological archaeology in 2012: mobility, economy and transformation," *American Anthropologist* 115, no. 2 (2013), 248–61.
- Kaldellis, Anthony, *Procopius of Caesarea. Tyranny, History, and Philosophy at the End of Antiquity* (Philadelphia, 2004).
- Kaldellis, Anthony, *Procopius of Caesarea. Tyranny, History, and Philosophy at the End of Antiquity* (Philadelphia, 2004).
- Kalik, Judith and Alexander Uchitel, *Slavic Gods and Heroes* (New York, 2018).
- Kalinin, N.F. and Al'fred Kh. Khalikov, "Imen'kovskoe gorodishche," in *Trudy Kuibyshevskoi arkheologicheskoi ekspedicii*, ed. A.P. Smirnov vol. 3, *Materialy i issledovaniia po arkheologii SSSR* 80 (Moscow, 1960), 226–50.

- Kałkowski, Tadeusz, "Dwie srebrne monety bizantyńskie Justyniana I znalezione pod Rabką," *WN* 11 (1967), 233–34.
- Kara, Michał, "Skandynawski skarb złotych przedmiotów z przełomu starożytności i średniowiecza w miejscowości Wapno, woj. Piłskie," *PArch* 42 (1994), 73–108.
- Karagiorgou, Olga, "LR2: a container for the military annona on the Danubian border?" in *Economy and Exchange in the East Mediterranean during Late Antiquity. Proceedings of a Conference at Somerville College, Oxford—29th May, 1999*, eds. S. Kingsley and M. Decker (Oxford, 2001), 129–66.
- Karaiskaj, Gjerak, "Die albanische Stadt Sarda. Entstehung der mittelalterlichen Stadt in Albanien," in *Actes du XI-e Congrès international d'archéologie chrétienne. Lyon, Vienne, Grenoble, Genève et Aoste (21–28 septembre 1986)*, vol. 3, eds. N. Duval, F. Baritel, and Ph. Pergola, *Studi di antichità cristiana* 41 (Rome, 1989), 2637–56.
- Kardaras, Georgios, "The Byzantine-Avar cooperation against the Slavs (578)," in *Aevum medium. Zborník na počesť Jozefa Hošša*, ed. J. Zábajník, *Studia Archaeologica Mediaevalia* 8 (Bratislava, 2006), 31–33.
- Kardaras, Georgios, "To 'schema ton Abaron' sto Strategikon tou Maurikiou. Mia kritike proseggise," *Vyzantinos Domos* 16 (2007–2008), 151–66.
- Kardaras, Georgios, "He exegerse ton Slabon hypo ton Samo enantion ton Abaron kai to zetema tou geographikou prosdiorismou tes hegemonias tou," *Byzantiaka* 29 (2010–2011), 91–111.
- Kardaras, Georgios, "Christian symbols among the nomads, 5th–8th century A.D.," in *Rome, Constantinople and Newly-Converted Europe. Archaeological and Historical Evidence*, eds. M. Salamon, M. Wołoszyn, A.E. Musin and P. Špehar, vol. 1, *U źródeł Europy Środkowo-Wschodniej 1.1* (Cracow/Leipzig/Rzeszów/Warsaw, 2012), 79–90.
- Kardaras, Georgios, "Metaxy Attila kai Baianou. To Byzantio kai oi nomadikoi laoi apo to 453 eos to 558," *Symmeikta* 24 (2014), 67–109.
- Kardaras, Georgios, "Oi Slaboi kai oi nomadikoi laoi ten epoche tou Ioustinianou (527–565)," in *Apo kardias. Mneme Demetriou Ch. Pantou*, eds. P. Sophoulis, M. Litina, and Ch. Karanasios (Athens, 2016), 235–52.
- Kardaras, Georgios, "A re-approach of Procopius' ethnographic account on the early Slavs," *Symmeikta* 27 (2017), 239–57.
- Kardaras, Georgios, *Byzantium and the Avars, 6th–9th Century AD. Political, Diplomatic and Cultural Relations*, East Central and Eastern Europe in the Middle Ages, 450–1450 51 (Leiden/Boston 2018).
- Karivieri, Arja, "The Athenian lamp industry and lamp trade from the fourth to the sixth century," in *Radovi XIII. Međunarodnog Kongresa za starokršćansku arheologiju. Split-Poreč (25.9.–1.10. 1994)*, eds. N. Cambi and E. Marin, vol. 2, *Studi di antichità Cristiana* 54 (Vatican/Split, 1998), 421–28.

- Kashkin, A.V. and Vlasta E. Rodinkova, "Pamiatniki sudzhanskogo regiona epokhi velikogo pereseleniia narodov," *Verkhnedonskoi arkheologicheskoi sbornik* 5 (2010), 80–92.
- Kasiuk, Alena F., "Rannelslavianskiia pomniki u baseyne nizhniay Prypiatsi: stan i perspektywy," in *Kalinkavichy i Kalinkavicki krai*, ed. A.A. Skep'ian (Minsk, 2016), 19–55.
- Kazakevičius, Vytautas, "Pogrebenie s nakonechnikom strely iz mogil'nika Plinkaigalis," *SA*, no. 3 (1986), 238–43.
- Kazakevičius, Vytautas, "Motifs of animal decorative pattern on bindings of the 5th–6th century drinking horns from Plinkaigalis burial ground (Lithuania)," *Finskt Museum Helsingfors* (1987), 45–63.
- Kazakevičius, Vytautas, *Oruzhie baltiskikh plemen II–VII vekov na territorii Litvy* (Vilnius, 1988).
- Kazakevičius, Vytautas, "Plinkaigalio kapinynas," *LA* 10 (1993), 1–218.
- Kazakevičius, Vytautas, "Kalniškių V–VI a. kapinyno keramika," *LA* 26 (2004), 9–28.
- Kazakevičius, Vytautas and A. Malonaitis, "Sacrifices of weapons in Baltic burials," in *Transformatio Mundi. The Transition from the Late Migration Period to the Early Viking Age in the East Baltic*, ed. M. Bertašius (Kaunas, 2006), 183–93.
- Kazakov, Evgenii P., "Novye issledovaniia imen'kovskikh pamiatnikov na Devich'em gorodki," in *Novoe v srednevekovoi arkheologii Evrazii*, ed. V.B. Kovalevskaia (Samara, 1993), 102–06.
- Kazakov, Evgenii P., "Kominternovskii II mogil'nik v sisteme drevnostei epokhi tiurkskikh kaganatov," in *Kul'tury evraziiskikh stepei vtoroi poloviny I tysiacheletia n.e. (voprosy khronologii). Materialy II Mezhdunarodnoi arkheologicheskoi konferentsii, 17–20 noiabria 1997 g.*, eds. D.A. Stashenkov, A.F. Kochkina, and L.V. Kuznecova (Samara, 1998), 97–150.
- Kazakov, Evgenii P., "Dva stekliannykh kubka VI v. n.e. iz nekropolei Uralo-Povolzh'ia," *Russian History* 32, nos. 3–4 (2005), 355–70.
- Kazamia-Tsernou, Maria I., *Mnemeiake topographia tes christianikes Thessalonikes. Oi naoi 40s–80s ai.* (Thessaloniki, 2009).
- Kazanaki-Lappa, Maria, "Athens from Late Antiquity to the Turkish Conquest," in *Athens from the Classical Period to the Present Day (5th century B.C.–A.D. 2000)*, eds. Ch. Bouras, M.B. Sakellariou, K.S. Staikos, and E. Touloupa (New Castle, 2000), 196–219.
- Kazanski, Michel, "Note sur le peuplement de la région du Dniepr moyen pendant la seconde moitié du VII<sup>e</sup> siècle et au VIII<sup>e</sup> siècle," *Revue archéologique*, no. 1 (1987), 84–90.
- Kazanski, Michel, "The sedentary elite in the 'empire' of the Huns and its impact on material civilisation in southern Russia during the early Middle Ages (5th–

- 7th centuries AD),” in *Cultural Transformations and Interactions in Eastern Europe*, eds. J. Chapman and P.M. Dolukhanov (Aldershot/Brookfield, 1993), 211–35.
- Kazanski, Michel, “The armament, horsemen’s accoutrements, and riding gear of the Long Barrow Culture (fifth to seventh centuries),” in *Weapons, Weaponry, and Man. In Memoriam Vytautas Kazakevičius*, ed. A. Bliujienė, *Archaeologia Baltica* 8 (Klaipėda, 2007), 238–53.
- Kazanski, Michel, “Les Hunnogours et le commerce de fourrure au VI<sup>e</sup> siècle,” in *Zwischen Fjorden und Steppe. Festschrift für Johan Callmer zum 65. Geburtstag*, ed. C. Theune, *Internationale Archäologie. Studia honoraria* 31 (Rahden, 2010a), 225–38.
- Kazanski, Michel, “Les O kontaktakh naseleniia territorii vostochnoi Estonii i Skandinavii v epokhu velikogo pereseleniia narodov,” in *Dialog kul’tur i narodov srednevekovoi Evropy. K 60-letiiu so dnia rozhdeniia Evgeniia Nikolaevicha Nosova*, eds. A.E. Musin and N.V. Khvoshchinskaia (St. Petersburg, 2010b), 330–36.
- Kazanski, Michel, “Skandinavskaia mekhovaia trgovlia i ‘Vostochnoi put’ v epokhu pereseleniia narodov,” *Stratum+*, no. 4 (2010c), 1–111.
- Kazanski, Michel, “O centrakh vlasti u slavian: dnestrovskie klady VII v.,” in *Peterburgskii apokrif. Poslanie ot Marka*, ed. O.V. Sharov (Chişinău, 2011), 509–26.
- Kazanski, Michel, “A propos des ‘yourtes des nomades’ sur les sites slaves (Haut Moyen Age),” in *L’archéologie du bâti en Europe, de la préhistoire au Moyen Age*, eds. L. Iakovleva, A. Korvin-Piotrovski, and F. Djindjian (Kiev, 2012), 267–81.
- Kazanski, Michel, “The Middle Dnieper area in the seventh century: an archaeological survey,” in *Constructing the Seventh Century*, ed. C. Zuckerman, *Travaux et mémoires du Centre de recherche d’histoire et civilisation de Byzance* 17 (Paris, 2013), 769–864.
- Kazanski, Michel, “Udila epokhi pereseleniia narodov iz pogrebeniia v Dolozhskom pogoste,” *Stratum+*, no. 5 (2014), 119–28.
- Kazanski, Michel, “O poiavlennii gepidov v Krymu v VI veke,” in *IX Mezhdunarodnyi vizantiiskii seminar ΧΕΡΣΩΝΟΣ ΘΕΜΑΤΑ: ΙΜΠΕΡΙΥΑ Ι ΠΟΛΙΣ. Sevastopol’ Gosudarstvennyi istoriko-arkheologicheskii muzei-zapovednik “Khersones Tavricheskii” 29 maia–3 iunია 2017 g. Materialy nauchnoi konferencii* (Sevastopol’, 2017), 53–58.
- Kazanski, Michel, “Tombes des élites steppiques de l’époque post-hunnique dans la région pontique,” *Přehled výzkumů* 58, no. 1 (2017), 65–84.
- Kazanski, Michel, “Voinskie pogrebeniia bosporskoj znati postgunnskogo perioda (vtoraia polovina V-pervaia polovina VI vv.),” *Stratum+*, no. 5 (2018), 75–86.
- Kazanski, Michel and Anna V. Mastykova, “Les contacts entre la Gaule du Nord et la côte sud-est de la mer Baltique durant l’époque des grandes migrations et au début de l’époque mérovingienne,” in *Voies d’eau, commerce et artisanat en Gaule mérovingienne*, eds. J. Plumier and M. Regnard, *Etudes et documents. Archéologie* 10 (Namur, 2005), 115–32.

- Kazanski, Michel, Anna V. Mastykova, and Konstantin N. Skvorcov, "Priznaki social'noi stratifikacii u naseleniia sambiisko-natangiiskooi kul'tury v nachale srednevekov'ia (seredina V–VII v.)," *RA*, no. 3 (2017), 28–45.
- Kazhdan, Alexander P., "Vizantiiskie goroda v VII–XI vv.," *VV* 21 (1954), 164–88.
- Kenéz, Árpád and Ákos Petó, "Szőlőmaradványok egy avar fegyveres férfi sírjából Dunaszentgyörgy-Kaszás-Tanya lelőhelyről," in *Hadak útján XXIV. A népvándorlások fiatal kutatóinak XXIV. konferenciája. Esztergom, 2014. november 4–6.*, eds. Cs. Balogh and B. Major, vol. 1 (Budapest/Esztergom, 2015), 691–706.
- Keresztes, Noémi Ninetta, "Fegyveres langobardok Magyarországon I. Típusok és fegyverkombinációk," in *Hadak útján XXIV. A népvándorlások fiatal kutatóinak XXIV. konferenciája. Esztergom, 2014. november 4–6.*, eds. Cs. Balogh and B. Major, vol. 1 (Budapest/Esztergom, 2015), 469–98.
- Keresztes, Noémi Ninetta, "Fegyveres langobardok és fegyvereik Magyarországon II. (kísérőleletek, temetkezési szokások, temetőszerkezetek, antropológia)," in *Hadak útján XXII. A népvándorlások fiatal kutatóinak XXII. konferenciája Visegrád, 2012. október 2–4.*, ed. M. Szabina (Visegrád, 2017), 129–52.
- Kerman, Branko. *Tü mo. Slovenske poselitev Prekmurja* (Murska Sobota, 2011).
- Keszi, Tamás, "Avar ötvöstárgyak Mezőfalváról," *Az Intercisa Múzeum Évkönyve* 1 (2016), 95–96.
- Khachaturian, N.A., "Vvedenie: sobstvennost' i zapadnoevropeiskom Srednevekov'e. Variacii iavleniia," *Istoriia. Elektronnyi nauchno-obrazovatel'nyi zhurnal* 8, no. 8 (2017), 1–9.
- Khairedinova, Elzara A., "Zhenskii kostium s bol'shimi priazhkami s khristianskoi simbolikoi iz Iugo-Zapadnogo Kryma," *KS* 10 (1999), 334–48.
- Khairedinova, Elzara A., "Zhenskii kostium s iuzhnokrymskimi orlinogolovymi priazhkami," *MAIET* 7 (2000), 91–133.
- Khairedinova, Elzara A., "Zhenskii kostium varvarov iugo-zapadnogo Kryma v VI–VII vv. (po materialam mogil'nika u s. Luchistoe)," in *Alushta i Alushtinskii region s drevneishikh vremen do nashikh dnei*, eds. V.L. Myts' et al. (Kiev, 2002), 34–47.
- Khairedinova, Elzara A., "Le costume des barbares aux confins septentrionaux de Byzance (VI<sup>e</sup>–VII<sup>e</sup> siècle)," in *Kiev-Cherson-Constantinople. Ukrainian Papers at the XXth International Congress of Byzantine Studies (Paris, 19–25 August 2001)*, eds. A.I. Aibabin and G.Iu. Ivakin, Occasional Monographs 1 (Kiev/Simferopol/Paris, 2007), 11–44.
- Khairedinova, Elzara A., "Byzantinische Elemente in der Frauentracht der Krimgoten im 7. Jahrhundert," in *Byzanz—das Römerreich im Mittelalter. Teil 3. Peripherie und Nachbarschaft*, eds. F. Daim and J. Drauschke, Monographien des Römisch-Germanischen Zentralmuseums 84 (Mainz, 2010) 59–94.



- Khardaev, Vladimir M., "Kochivnyts'ki pokhovalni komplekxy VI–VII st. bilia s. Vasylivka na Khersonshchyni," *Arkheolohiia* (2015), no. 3, 107–17.
- Kharitonov, D.E., "Nakhodka vostochnykh monet V–VIII vv. v Prikam'e," *Na zapadnom Urale* 4 (1962), 170–76.
- Kharitonov, S.V. *Drevnii gorod Eski-Kermen. Arkheologiia, istoriia, gipotezy* (St. Petersburg, 2004).
- Khavliuk, P.I., "Rannelslavianskie poseleniia v srednei chasti Iuzhnogo Pobuzh'ia," SA, no. 3 (1961), 187–201.
- Khavliuk, P.I., "Rannelslavianskie poseleniia Semenki i Samchincy v srednem techenii Iuzhnogo Buga," in *Slaviane nakanune obrazovaniia Kievskoi Rusi*, ed. B.A. Rybakov, Materialy i issledovaniia po arkheologii SSSR 108 (Moscow, 1963), 320–50.
- Khavliuk, P.I., "Rannelslavianskie poseleniia v basseine Iuzhnogo Buga," in *Rannelsrednevekove vostochnoslavianskie drevnosti*, ed. P.N. Tret'iakov (Leningrad, 1974), 181–215.
- Khavliuk, P.I., "O nachal'nykh etapakh razvitiia rannelslavianskogo remesla (na materialakh remeslennykh sooruzhenii na iuzhnom Buge)," in *Trudy V Mezhdunarodnogo Kongressa arkheologov-slavistov, Kiev 18–25 sentiabria 1985 g.*, ed. V.D. Baran, vol. 4 (Kiev, 1988), 226–31.
- Khazanov, Anatolii M., "'Military democracy' and the epoch of class formation," in *Soviet Ethnology and Anthropology Today*, ed. Iu.V. Bromlei (The Hague/Paris, 1974), 133–46.
- Khazanov, Anatolii M., *Nomads and the Outside World*, 2nd ed. (Madison, 1994).
- Khazanov, Anatolii M., "Nomads of the Eurasian steppes in historical perspective," in *Nomadic Pathways in Social Evolution*, eds. Th.J. Barfield, D.M. Bondarenko, and N.N. Kradin, *Civilizacionnoe izmerenie* 5 (Moscow, 2003), 25–49.
- Khrapunov, Igor N., "K diskussii o dolzhnosti duki Khersona," *VV70* (2011), 37–50.
- Khrisimov, Nikolai, "Edno rannosrednevekovno probodno-sechashto orazhzie (VI–VII v): ot kolekciiata na NIM," *INIM* 20 (2008), 51–61.
- Khrushkova, Liudmila G., "O zhivopisi rannekhristsianskikh skleпов v Krymu: sto let posle Mikhaila Ivanovicha Rostovceva," in *Vizantiia v kontekste mirovoi kul'tury. K 100-letiiu so dnia rozhdeniia Alisy Vladimirovny Bank, 1906–1984. Materialy konferencii*, eds. V.N. Zaleskaia et al., *Trudy Gosudarstvennogo Ermitazha* 42 (St. Petersburg, 2008), 121–32 and 583.
- Khrushkova, Liudmila G., "The study of the early Byzantine architecture of Chersonesus in the Crimea: progress or dead end?" *HAM* 23, no. 2 (2017), 856–74.
- Khvol'son, D.A., N.V. Pokrovskii, and Ia. I. Smirnov. *Serebrianoie siriiskoe bliudo, naidennoe v Permskom krae* (St. Petersburg, 1899).
- Kidd, Dafydd and Liudmila V. Pekars'ka, "New insight into the hoard of 6th–7th century silver from Martynovka," in *La noblesse romaine et les chefs barbares du*

- III<sup>e</sup> au VII<sup>e</sup> siècle*, eds. F. Vallet and M. Kazanski, *Mémoires de l'Association française d'archéologie mérovingienne* 9 (Saint-Germain-en-Laye, 1995), 351–60.
- Kihno, Kersti and Heiki Valk, "Archaeological and palynological investigations at Ala-Pika, south-east Estonia," in *Environmental and Cultural History of the Eastern Baltic Region*, ed. U. Miller, PACT 57 (Rixensart, 1999), 221–37.
- Kiiashkina, Petia, Todor Marvakov, and Stoianka Dimova, "Spasitelni arkheologicheski prouchvaniia v gr. Nesebăr—obekt 'Antichen nekropol na Mesemvriia' UPI V, kv. 54A," *AOR* (2008), 324–27.
- Kim, Hyun Jin, *The Huns, Rome and the Birth of Europe* (Cambridge/New York, 2013).
- Kim, Hyun Jin, *The Huns* (London, 2016).
- Kim, Minko, Heung-Nam Shin, Jinhee Kim, Kyeong-jung Roh, Ara Ryu, Haesun Won, Juho Kim, Semi Oh, Hyeongsin Noh, and Sumin Kim, "The ins and the outs: foodways, feasts, and social differentiation in the Baekje Kingdom, Korea," *Journal of Anthropological Archaeology* 43 (2016), 128–39.
- Kiourtzian, Georges, "Le Psaume 131 et son usage funéraire dans la Grèce, les Balkans et la Cappadoce la haute époque byzantine," *CA* 45 (1997), 31–39.
- Kirilov, Chavdar, *Die Stadt des Frühmittelalters in Ost und West. Archäologische Befunde Mitteleuropas im Vergleich zur östlichen Balkanhalbinsel*, Studien zur Archäologie Europas 3 (Bonn, 2006).
- Kirilov, Chavdar, "Der rissig gewordene Limes. Höhensiedlungen im östlichen Balkan als Zeugnis für die Schwache des oströmischen Reiches in der Spätantike," in *The Lower Danube in Antiquity (VI c. B.C.–VI c. AD). International Archaeological Conference, Bulgaria-Tutakan*, 6.–7.10.2005, ed. L. Vagalinski (Sofia, 2007), 329–52.
- Kiss, Attila, *Avar Cemeteries in County Baranya* (Budapest, 1977).
- Kiss, Attila, "Völkerwanderungszeitliches, germanische Langschwert von Dunapentele/Dunaújváros," *Alba Regia* 19 (1981), 145–65.
- Kiss, Attila, "Egy Baldenheim-típusú sisak a Magyar Nemzeti Múzeum Régészeti Gyűjteményében," *AE* 110 (1983), 274–81.
- Kiss, Attila, "Numizmatikai adatok az itáliai keleti got királyság (489/93–552) kiterjedéséhez," *NK* 82–83 (1983–1984), 19–21.
- Kiss, Attila, "Die Frage der geographischen Lage des früh- und mittelawarenzeitlichen Herrschaftszentrum," *JPME* 33 (1988), 77–89.
- Kiss, Attila, "V–VI. századi Kárpát-medencei uralkodók-régész szemmel," *Agria* 25–26 (1989), 201–20.
- Kiss, Attila, "A Kunbábonyi 1., kora-avar vezéri sír leleteinek belső összefüggései. A leletanyag csoportosítása," *CAH* (1994), 267–84.
- Kiss, Attila, "Tanulmányok a kora avar kori kunbábonyi vezérsírról," *MFME* 1 (1995), 131–49.

- Kiss, Attila, *Das awarenzeitlich-gepidische Gräberfeld von Kölked-Feketekapu A*, Monographien zur Frühgeschichte und Mittelalterarchäologie 2 (Innsbruck, 1996).
- Kiss, Attila, "Glasfunde aus Gräbern des frühmittelalterlichen Karpatenbeckens (400–1000)," in *Pannonia and Beyond. Studies in Honour of László Barkóczi*, ed. A. Vaday (Budapest, 1999), 217–41 and 682–90.
- Kiss, Attila, *Das awarenzeitliche Gräberfeld in Kölked-Feketekapu B*, Monumenta Avarorum Archaeologica 6 (Budapest, 2001).
- Kiss, Attila, "Archäologische und numismatische Angaben zur Siedlungsgeschichte des Donau-Theiß-Zwischenstromlandes in der zweiten Hälfte des 5. und der ersten Hälfte des 6. Jahrhunderts," in *Spomenica Jovana Kovachevicha*, R. Bunardžić and Ž. Mikić (Belgrade, 2003), 185–93.
- Kiss, Attila and János Nemeskéri, "Das langobardische Gräberfeld von Mohács," *JPME* 10 (1964), 95–127.
- Kiss, Attila P., "A gepidák avar kori továbbélésének vizsgálatáról," in *Középkortörténeti tanulmányok 6. A VI. Medievisztikai PhD-konferencia (Szeged, 2009. június 4–5. előadásai)*, eds. P.G. Tóth and P. Szabó (Szeged, 2010), 119–34.
- Kiss, Attila P., "'Nem a hadnak sokasága ...' Megjegyzések a Tisza-vidéki gepida fegyveres réteg összetételéhez," in *Középkortörténeti tanulmányok 7. A VII. Medievisztikai PhD-konferencia (Szeged, 2011. június 1–3.)*, eds. A.P. Kiss, F. Piti, and G. Szabados (Szeged, 2012), 135–64.
- Kiss, Attila P., "... ut strenui viri ..." *A Kárpát-medencei gepidák története* (Budapest, 2015).
- Kiulkys, Daumantas, "Senajo ir vidurino geležies amžiaus skydai Lietuvoje," *AL* 11 (2010), 33–114.
- Klanica, Zdeněk, *Mutěnice-Zbrod. Zaniklé slovanské sídliště ze 7.–10. století*, Spisy Archeologického ústavu AV ČR Brno 36 (Brno, 2008).
- Klein, Lev S., *Soviet Archaeology. Schools, Trends, and History* (Oxford, 2012).
- Kliaugaitė, Vida and Laurynas Kurila, "Baliulai barrow cemetery," in *Archaeological Investigations in Independent Lithuania, 1990–2010*, eds. G. Zabiela, Z. Baubonis and E. Marcinkevičiūtė (Vilnius, 2012), 95–101.
- Kliuchnikov, Vladimir V., "Kochev'e khazarskogo vremeni v okruge Nizhnegnilovskogo gorodishcha po dannym raskopok M.A. Millera," in *Prichernomor'e v antichnoe i rannesrednekovoe vremia. Sbornik nauchnykh trudov, posviashchennyi 65-letiiu profesora V.P. Koyplova*, ed. A.N. Kovalenko (Rostov-na-Donu, 2013), 413–23.
- Kłoczowski, Jerzy, *East Central Europe in the Historiography of the Countries of the Region* (Lublin, 1995).
- Knific, Timotej. 'Vranje near Sevnica: a Late Roman settlement in the light of certain pottery finds.' *AV* 45 (1994), pp. 211–37.
- Kobyliński, Zbigniew, "Early medieval hillforts in Polish lands in the 6th to the 8th centuries: problems of origins, function, and spatial organization," in *From the*

- Baltic to the Black Sea. Studies in Medieval Archaeology*, eds. D. Austin and L. Alcock (London, 1990), 147–56.
- Kobyliński, Zbigniew, “The Slavs, 500–700 A.D.,” in *The New Cambridge Medieval History*, ed. P. Fouracre, vol. 1 (Cambridge/New York, 2005), 524–44.
- Kobyliński, Zbigniew and Zdzisław Hensel, “Imports or local products? Trace elements analysis of copper-alloy artefacts from Hacki, Białystok Province, Poland,” *ArchPol* 31 (1993), 129–40.
- Kobyliński, Zbigniew and Wojciech Szymański, “Pradziejowe i wczesnośredniowieczne osadnictwo w zespole kemów w Haćkach,” in *Haćki. Zespół przyrodniczo-archeologiczny na Równinie Bielskiej*, ed. J.B. Faliński (Białowieża, 2005), 43–74.
- Kobyliński, Zbigniew and Wojciech Szymański, “Grodzisko w Haćkach na Podlasiu,” in *Grody średniowiecznego Mazowsza. Księga poświęcona pamięci Marka Dulnicza*, eds. M. Żurek and M. Krasna-Korycińska, *Archaeologica Hereditas* 4 (Warsaw/Zielona Góra, 2015), 111–46.
- Koch, Ursula, “Mediterrane und fränkische Glasperlen des 6. und 7. Jahrhunderts aus Finnland,” in *Studien zur vor- und frühgeschichtlichen Archäologie: Festschrift für Joachim Werner zum 65. Geburtstag*, eds. G. Kossack and G. Ulbert, vol. 2, *Münchner Beiträge zur Vor- und Frühgeschichte. Ergänzungsband 1* (Munich, 1974), 495–520.
- Kochkurkina, Svetlana I., *Arkheologicheskie pamiatniki korely V–XV vv.* (Leningrad, 1981).
- Kóčka-Krenz, Hanna, “The beginning of metal casting in Polish territories in the early Middle Ages (the 6th–13th centuries),” in *Trudy V Mezhdunarodnogo Kongressa arkheologov-slavistov, Kiev 18–25 sentiabria 1985 g.*, ed. P.P. Tolochko, vol. 2 (Kiev, 1988), 83–89.
- Köhler, Ralf, “Frühe slavische Siedlung in Pommern unter besonderer Berücksichtigung der neuen Grabungen in Dziedzice/Deetz,” *Offa* 37 (1980), 177–83.
- Koicheva, Kina, “Cerkva i nekropol pri ukrepenoto selishte na m. Gradishte pri Gabrovo,” in *The Roman and Late Roman City. The International Conference (Veliko Turnovo 26–30 July 2000)*, eds. L. Ruseva-Slokoska, R.T. Ivanov and V. Dinchev (Sofia, 2002), 178–83.
- Kolendo, Jerzy, “Napływ bursztynu z Północy na tereny imperium rzymskiego w I–VI w. n. e.,” *Prace Muzeum Ziemi* 41 (1990), 91–100.
- Kolendo, Jerzy, “Ambra nel Nord dell'impero Romano,” in *Supplying Rome and the Empire. Proceedings of an International Seminar Held at Siena-Certosa di Pontignano on May 2–4, 2004 on Rome, the Provinces, Production and Distribution*, eds. E. Papi and M. Bonifay, *Journal of Roman Archaeology. Supplementary Series* 69 (Portsmouth, 2007), 97–107.
- Kollautz, Arnulf, “Die Awaren. Die Schichtung in einer Nomadenherrschaft,” *Saeculum* 5, no. 2 (1954), 129–78.

- Koloda, Vladimir V., "Fibuly 'ants'kykh' chasiv na gorodysychi Koropovi Khutory," *In Sclavenia terra* 1 (2016), 65–72.
- Koloda, Vladimir V., A.V. Kushchenko, and M.L. Shvecov, "Pamiatnik zhelezoprovodstva u s. Bogorodichnoe Doneckoi oblasti," *Donetskiy arkhologichnyi zbirnyk* 11 (2004), 145–55.
- Kolosovskii, Iu. V., "Arkheologicheskoe issledovanie gorodishcha i selishcha okolo derevni Vezhki Dubrovenskogo raiona Vitebskoi oblasti v 1994–1998 gg.," in *Slaviane na territorii Belarusi v gosudarstvennyi period. K 90-letiiu so dnia rozhdeniia doktora istoricheskikh nauk, professora Leonida Davydovicha Pobolia*, ed. A.A. Kovalenia, vol. 2 (Minsk, 2016), 5–13 and 398.
- Költő, László, "Avar kori bronztárgyak röntgenmissziós analízise," *SMK* 5 (1982), 5–68.
- Koltsida-Makri, Ioanna, "Molybdoboulla apo anaskaphes kai genikotera gnostes proleuses ston Helladiko choro," in *Ἡπειρονδῆ (Epeironde). Proceedings of the 10th International Symposium of Byzantine Sigillography (Ioannina, 1–3. October 2009)*, eds. Ch. Stavrakos and B. Papadopoulou (Wiesbaden, 2011), 237–55.
- Komar, Oleksyi V., "Pereshchepinskii kompleks v kontekste osnovnykh problem istorii i kul'tury kochevnikov Vostochnoi Evropy VII–nach. VIII v.," in *Stepi Evropy v epokhu srednevekov'ia*, ed. A.V. Evgelevskii vol. 5 (Doneck, 2006a), 7–244 and 413–32.
- Komar, Oleksyi V., "Pogrebenie kochevnika nach. VIII v. u sela Zhuravlikha v Srednem Podneprov'e," in *Stepi Evropy v epokhu srednevekov'ia*, ed. A.V. Evgelevskii, vol. 5 (Donetsk, 2006b), 403–12.
- Komar, Oleksyi V., "The climate factor in life of the North Black Sea region nomads at the end of fifth-seventh centuries A.D.," *Chronica. Annual of the Institute of History, University of Szeged* 7–8 (2007–2008), 125–33.
- Komar, Oleksyi V., "Pamiatniki tipa Sukhanovo: k voprosu o kul'ture bulgar severnogo Prichernomor'ia 2-i poloviny VI–nachala VII v.," *ss* 3 (2008), 87–117.
- Komar, Oleksyi V., "Detali obuvi vostochnoevropeskikh kochevnikov VI–VII vv.," in *Slaviano-russkoe iuvelirnoe delo i ego istoki. Materialy Mezhdunarodnoi nauchnoi konferencii, posviashchennoi 100-letiiu so dnia rozhdeniia Gali Fedorovny Korzukhinoi, Sankt-Peterburg, 10–16 aprelia 2006 g.*, eds. A.A. Peskova, O.A. Shcheglova, and A.E. Musin (St. Petersburg, 2010), 94–115 and 589–90.
- Komar, Oleksyi V., "Pogrebal'nye obriady bulgar 2-i pol. VI-nach. VII v. (pamiatniki tipa Sukhanovo)," *Dobrudzha* 24–25 (2013), 31–52.
- Komar, Oleksyi V., "Novye tendencii v issledovaniakh arkheologii kochevnikov Iugo-Vostochnoi Evropy VI–IX vv.," in *Hadak útján XXIV. A népvándorlások fiatal kutatóinak XXIV. konferenciája. Esztergom, 2014. november 4–6.*, eds. Cs. Balogh and B. Major (Budapest/Esztergom, 2015), 859–71.
- Komar, Oleksyi V., "Archaeological and archaeomagnetic dating of early medieval Kantsyrka type pottery," *AB* 22, no. 3 (2018), 39–70.

- Komar, Oleksyi V. and Vladimir M. Khardaev, "Zachepilovskii ('Novosanzharskii') kompleks rubezha VII–VIII vv.," in *Stepi Evropy v epokhu srednevekov'ia. Khazarское vremia. Sbornik nauchnykh trudov*, ed. A.V. Evgelevskii (Donetsk, 2012), 243–96.
- Komar, Oleksyi V. and Ruslan S. Orlov, "Pogrebeniia kochevnika 2-i pol. VII v. u sela Chernomorskoe," in *Stepi Evropy v epokhu srednevekov'ia*, ed. A.V. Evgelevskii, vol. 5 (Donetsk, 2006), 387–98.
- Komar, Oleksyi V., Anatolii I. Kubyshev, and Ruslan S. Orlov, "Pogrebeniia kochevnikov VI–VII vv. iz severo-zapadnogo Priazov'ia," in *Stepi Evropy v epokhu srednevekov'ia*, ed. A.V. Evgelevskii, vol. 5 (Donetsk, 2006), 245–374.
- Komatarova-Balinova, Evgeniia, "Asparukhovite bălgari i severite—arkheologicheski sreshthu istoricheski svidetelstva," in *In honorem professoris Stanislav Stanilov ad multos annos*, eds. B. Petrunova, A. Aladzhov and V. Grigorov (Sofia, 2016), 97–116.
- Koncz, István, "About brooches and networks. Some remarks on the female dress in the 6th century Pannonia," in *Hadak útján. A népvándorláskori fiatal kutatóinak XXVI. konferenciája. Gazdaság—kereskedelem—kézművesség*, eds. Zs. Rácz, I. Koncz and B. Gulyás (Budapest, 2018), 163–76.
- Kondakov, N.P., *Russkie klady. Izsledovanie drevnostei velikokniazheskogo perioda* (St. Petersburg, 1896).
- Kondé, Zsófia, Attila Kreiter, Bernadett Bajnóczi, Mária Túth, and Orsolya Viktorik, "The organization of ceramic production: a comparative analysis of typology and petrography at the Avar Age settlement of Daruszentmiklő," in *Hadak útján. A népvándorláskori fiatal kutatóinak XXVI. konferenciája. Gazdaság—kereskedelem—kézművesség*, eds. Zs. Rácz, I. Koncz and B. Gulyás (Budapest, 2018), 177–232.
- Kondrashin, V.V., "Metallograficheskii analiz kuznechnykh izdelii s Vypolzovskogo selishcha," in *Samarskii krai v istorii Rossii. Materialy iubileinoi nauchnoi konferencii, 6–7 fevralia 2001 g.*, ed. P.S. Kabytov (Samara, 2001), 190–92.
- Kondrat'eva, G.T., "Novye dannye iz istorii drevneumurtskoi odezhdy," *Uchenye zapiski Moskovskogo oblastnogo pedagogicheskogo instituta* 183, no. 2 (1967), 327–33.
- Koneckii, Vladimir Ia., "Slavianskaia kolonizaciia severo-zapada v otechestvennoi istoricheskoi i arkheologicheskoi literature," *NNZIA* 12 (1998), 226–41.
- Koneckii, Vladimir Ia., "Nekotorye voprosy izucheniia drevneishikh pakhotnykh orudii Novgorodskoi zemli," *NNZIA* 14 (2000), 239–60.
- Konopa, Prokop, "Nové nálezy slovanských sídlištních objekt v Praze 6- Řepích," *AP* 4 (1983), 177–84.
- Konti, Voula. "Biotechnike drasterioteta sten perioche ton Halieon Ermionidas (60s–70s ai.)," in *Praktika tou E' diethnous synedriou Peloponnesiakon spoudon. Argos-Nauplion, 6–10 septembriou 1995*, eds. T.A. Gritsopoulos and K.L. Kotsonis, vol. 2, Peloponnesiaka Parartema 22 (Athens, 1997), 335–56.

- Kontny, Bartosz, "A Scandinavian trace: a beak fibula from the Late Migration period cemetery at Nowinka in northern Poland," *ArchB* 14 (2010), 241–46.
- Kontny, Bartosz, "Trade, salt and amber. The formation of late Migration Period elites in the 'Balti-Culti' area of northern Poland (the Elbląg Group)," *ArchB* 17 (2011), 60–76.
- Kontny, Bartosz and Mirosław Pietrzak, "Merovingian belt on the Vidivarian waist? Unexpected import from the Elbląg Group cemetery at Nowinka, Tolkmicko com.," in *Arkheologiia baltiiskogo regiona*, eds. N.A. Makarov, A.V. Mast'ykova and A.N. Khokhlov (Moscow/St. Petersburg, 2013), 122–33.
- Kontny, Bartosz, Jerzy Okulicz-Kozaryn, and Mirosław Pietrzak, "Horse graves in the Elbląg group. The case of the cemetery at the Nowinka, Tolmicko commune," *ArchB* 11 (2009), 164–84.
- Kormazopoulou, Lina and Dimitris Chatzilazarou, *Spelαιο Andritsas—moirao kataphygio. Katalogos ektheses, 26 Septembriou–15 Noembriou 2005* (Athens, 2005).
- Korolev, Klim S., "Poselenie vanvizdinskoi kul'tury Shoinaty VI," in *Pamiatniki material'noi kul'tury na Evropeiskom Severo-Vostoke*, ed. E.A. Savel'eva, *Materialy po arkheologii Evropeiskogo Severo-Vostoka* 10 (Syktyvkar, 1986), 93–98.
- Korolev, Klim S., "Khoziaistvennye zaniatiia naseleniia srednei Vychehdy v Vanvizdinskuii epokhu (VI–X vv.)," in *Aktual'nye problemy kraevedeniia Respubliki Komi. Tezisy dokladov nauchnogo- prakticheskogo konferencii, posviashchennoi 75-letiiu Obshchestva izucheniiia Komi kraia*. Syktyvkar, 14–16 maia 1997 g., ed. N.A. Macuk (Syktyvkar, 1997), 47–48.
- Korolev, Klim S., *Naselenie srednei Vychehdy v drevnosti i srednevekove* (Ekaterinburg, 1997).
- Korolev, Klim S. and Eleonora A. Savel'eva, *Genezis srednevekovykh kul'tur basseina Vychehdy (II pol. I tys. n.e.-nachalo II tys. n.e.)* (Syktyvkar, 1988).
- Korolev, Klim S., A.M. Murygin, and Eleonora A. Savel'eva, "Vanvizdinskaia kul'tura (VI–X vv. n.e.)," in *Arkheologiia Respubliki Komi*, eds. E.A. Savel'eva, A.F. Smetanin, P. Iu. Pavlov and A.M. Murygin, vol. 6 (Moscow, 1997), 400–77.
- Koroliuk, Vladimir D., "Avary (obry) i duleby Russkoi letopisi," in *Arkheograficheskii ezhegodnik za 1962 god. K 70-letiiu akademika M.N. Tikhomirova* (Moscow, 1963), 24–31.
- Körösi, Andrea, "A székkutas-kápolnadúlői avar temető archaeozoológiai vizsgálata," *MFMSA* 11 (2005), 229–76.
- Korshenko, A.N., "Klad pozdnerimskikh i rannevizantiiskikh mednykh monet iz Baidarskoi doliny," in *Imperia i polis. Sbornik nauchnykh trudo*, ed. N.A. Alekseenko (Sevastopol', 2013), 247–66.
- Kory, Raimar W., "Avar settlements: a challenge to archaeological research," in *The Turks. 1: Early Ages*, eds. H.C. Güzel, C. Oğuz and O. Karatay (Ankara, 2002), 607–16.

- Korzukhina, Galina F., "Klady i sluchainye nakhodki veshchei kruga 'drevnostei antov' v srednem Podneprov'e. Katalog pamiatnikov," *MAIET* 5 (1996), 352–435, 586–705.
- Kosso, Cynthia Karen, "Public policy and agricultural practice: an archaeological and literary study of Late Roman Greece," Ph.D. Dissertation, University of Illinois at Chicago (Chicago, 1993).
- Kostić, Zorica., "Marginalije uz nekoliko epigrafskikh spomenika iz Makedonije," in *Spomenica Jovana Kovachevicha*, eds. R. Bunardžić and Ž. Mikić (Belgrade, 2003), 195–219.
- Kostrzewski, Józef, *Zagadnienie ciągłości zaludnienia ziem polskich w pradziejach (od połowy II tysiąclecia pne do wczesnego średniowiecza)*, Prace Komisje Archeologicznej 4.3 (Poznań, 1961).
- Kotłowska, Anna, "Słowianie w Historii powszechnej Teofilakta Simokatty—bizantyńska perspektywa aksjologiczna," *Slavia Meridionalis* 17 (2017), 1–15.
- Kotłowska, Anna and Łukasz Różycki, "The image of the Slavs in the work of Theophylact Simocatta," in *Slovani, naša dediščina*, eds. J. Lux, B. Štular and K. Zanier, *Vestnik* 27 (Ljubljana, 2018), 16–27.
- Kovačová, Lucia, "Analýza vybraných aspektov na longobardských pohrebiskách na strednom Dunaji," *Musaica* 28 (2014), 75–96.
- Kovács, István, "A mezőbánsági ásatások. Őskori telepnyomok és temető, La-Tène ízlésű temetkezés, népvándorláskori temető," *DENMER* 4 (1913), 265–329.
- Kovalev, Roman K., "The infrastructure of the northern part of the 'fur road' between the Middle Volga and the East during the Middle Ages," *AEMA* 11 (2000), 25–64.
- Kovalev, Roman K., "Commerce and caravan routes along the northern Silk Road (sixth-ninth centuries). Part I: the western sector," *AEMA* 14 (2005), 55–106.
- Kovpanenko, G.T., E.P. Buniatin, and N.A. Gavriliuk, "Raskopki kurganov u s. Kovalenka," in *Kurgany na iuzhnom Buge*, eds. V.F. Gening, G.T. Kovpanenko, and A.I. Terenozhkin (Kiev, 1978), 7–132.
- Kovrig, Ilona, "Germán lelet Gyuláról," *FA* 6 (1954), 86–91.
- Kovrig, Ilona, *Das awarenzeitliche Gräberfeld von Alattyán*, *Archaeologia Hungarica* 40 (Budapest, 1963).
- Kovrig, Ilona and József Korek, "Le cimetière de l'époque avare de Csóka (Čoka)," *AAASH* 12 (1960), 257–97.
- Kovtun, Svetlana. P., *Rekonstrukcia social'noi struktury naseleniia Verkhnego Prikam'ia vtoroi poloviny I tys. n. e. (po materialam mogil'nikov)* (Izhevsk, 2006).
- Kovtun, Svetlana. P., "K voprosu o social'noi strukture rannesrednevekovogo naseleniia verkhnego Prikam'ia (po materialam nevolinskikh mogil'nikov IV–IX vekov)," *Arkheologiiia, etnografiia i antropologiiia Evrazii* 1 (2010), 44–52.
- Kowalski, Jacek, "Archeologiczne badania cmentarzyska w Chojnowie gmina Tolmicko," *Rocznik Elbląski* 10 (1985), 227–29.



- Kozak, Denis N., "Novi rann'oslovians'ki pamiatky v mezhyrichchi Dnistra i Zachidnogo Bugu," *Arkheolohiia* 47 (1984), 89–94.
- Kozlovskaiia, N.B., "K proiskhozhdeniiu sorno-polevoi flory Belorussii," in *Floristicheskie i geobotanicheskie issledovaniia v Belorussii*, ed. L.P. Smoliak (Minsk, 1970), 16–21.
- Kozub, Marcin, "The chronology of the inflow of Byzantine coins into the Avar khaganate," in *Origins of Central Europe*, ed. P. Urbańczyk (Warsaw, 1997), 241–46.
- Kozub-Woloszyn, Marcin, "Monety bizantyńskie VI–VIII w. nad  rodkowym Dunajem i kwestia ich zr znicowania pod wzgledem miejsca emisji," in *Istoriia i kultura drevnikh i srednevekovykh slavian*, ed. V.V. Sedov, Trudy VI Mezhdunarodnogo Kongressa Slavianskoi Arkheologii 5 (Moscow, 1999), 287–94.
- Kralov nszky, Alan, "A hajd dorigo VII. sz zadi avar temet  (el zetes ismertetes)," *A Debreceni D ri M zeum  vk nyve* 68 (1989–1990), 117–39.
- Kr piec, "Marek, Dendrochronologiczne datowanie zwęglonych pr b drewna z wczesnośredniowiecznej p lziemanki z Krakowa-Nowej Huty-Wyci za (stanowisko 5B)," *MANH* 19 (1996), 129–34.
- Kr piec, Marek, "Oak dendrochronology of the Neoholocene in Poland," *Folia quaternaria* 69 (1998), 5–133.
- Krasnov, Iurii A., *Bezvodninskii mogil'nik. K istorii Gor'kovskogo Povolzh'ia v epokhu rannego srednevekov'ia* (Moscow, 1980).
- Krasnov, Iurii A., "O date Bereznikovskogo gorodishcha," *KSIA* 162 (1980), 60–67.
- Kravchenko, T.A., "Shatrishchenskii mogil'nik (po raskopkam 1966–1969 gg.)," in *Arkheologiia Riazanskoi zemli. Sbornik statei*, ed. A.L. Mongait (Moscow, 1974), 116–83.
- Krekovi , Eduard, "Ktol bol prv y? Nacionalizmus v slovenskej a maďarskej archeol gii a historiografii," *Študijn  zvesti* 36 (2004), 51–53.
- Krenke, N.A., *D'iakovo gorodishche: kul'tura naseleniia basseina Moskvyy-reki v I tys. do n. e.-I tys. n. e.* (Moscow, 2011).
- Krenke, N.A., "Pozdned'iakovskaiia kul'tura na territorii basseina Moskvyy-reki," in *Rannesrednevekovyye drevnosti lesnoi zony Vostochnoi Evropy (V–VII vv.)*, eds. A.M. Oblomskii and I.V. Islanova (Moscow, 2016), 261–332.
- Kroll, Henriette. *Tiere im byzantinischen Reich. Arch ozoologische Forschungen im  berblick*, Monographien des R misch-Germanischen Zentralmuseums, 87 (Mainz, 2010).
- Kropotkin, Vladislav V., *Klady vizantiiskikh monet na territorii SSSR*, Arkheologiia SSSR E4–4 (Moscow, 1962).
- Kropotkin, Vladislav V., "Vizantiiskaia chasha iz Kryloskogo klada VII v.," *vv* 31 (1970), 194–95.
- Kropotkin, Vladislav V., "Klad serebriannykh veshchei VII veka iz s. Krylos v Podnestrov'e," *AAC* 12 (1971), 65–71.

- Krosigk, Hildegard Schwerin von., "Zum Aussagewert zweier Bronzeblecharbeiten im Permer Tierstil untern den Votiven der Lomatovo-Kultur an der Kama im Uralvorland im 6.–9. Jahrhundert," *EA* 5 (1999), 575–94.
- Kruglov, Evgenii V., "Slozhnosostavnye luki Vostochnoi Evropy khazarskogo vremeni," in *II Gorodcovskie chteniia. Materialy nauchnoi konferentsii, posviashchennoi 100-letiiu deiatel'nosti V.A. Gorodcova v GIM, aprel' 2003 g.* (Moscow, 2005), 307–20.
- Kuchma, V.V., "Strategikon' Mavrikiia," in *Svod drevneishikh pis'mennykh izvestii o slavianakh*, eds. L.A. Gindin, S.A. Ivanov and G.G. Litavrin, vol. 1 (Moscow: Nauka, 1991), 364–93.
- Kühn, Herbert, *Die germanischen Bügelfibeln der Völkerwanderungszeit im Mitteldeutschland* (Graz, 1981).
- Kukhareno, Iurii V., "Novopokrovskii mogil'nik i poseleniia," *Arkheolohiia* 6 (1952), 33–50.
- Kulakov, Vladimir I., "Mogil'niki zapadnoi chasti Mazurskogo poozer'ia konca V-nachala VIII vv. (po materialom raskopok 1878–1938 gg.)," *Barbaricum* 1 (1989), 148–276.
- Kulakov, Vladimir I., *Drevnosti prussov VI–XIII vv. Svod arkheologicheskikh istochnikov G1–9* (Moscow, 1990).
- Kulakov, Vladimir I., "Gräber pruzzischer Stammesführer aus Warnikam," *EA* 3 (1997), 595–628.
- Kulakov, Vladimir I., "Poiasnye nabory s proreznym dekorom v drevnostiakh aristokratii zapadnykh baltov VII v.," *Stratum+*, no. 5 (2018), 93–104.
- Kuleshov, Viacheslav S., "Serebro za mekha iz strany mraka: pamiatniki vizantiiskoi, vostochnoi i zapadnoi torevtiki i numizmatiki v sakral'noi ekonomike Iugorskogo obshchestva V–XV vv.," in *Vizantiia v kontekste mirovoi kul'tury. Materialy konferentsii, posviashchennoi pamiati Alisy Vladimirovny Bank, 1906–1984*, ed. V.N. Zalesskaia et al., *Trudy Gosudarstvennogo Ermitazha* 89 (St. Petersburg, 2017), 363–72.
- Kulcsár, Gabriella, "Ordacsehi-Kis-töltés," in *Gördülő idő. Régészeti feltárások az M7-es autópálya Somogy megyei szakaszán Zamárdi és Ordacsehi között*, eds. K. Belényesy, Sz. Honti and V. Kiss (Budapest, 2007), 185–92 and 195.
- Kuna, Martin and Naďa Profantová, *Počátky raného středověku v Čechách. Archeologický výzkum sídelní aglomerace kultury pražského typu v Roztokách* (Prague, 2005).
- Kuna, Martin, Mária Hajnalová, Lenka Kovačiková, Lenka Lisá, Jan Novák, Michal Bureš, Václav Cílek, Jiří Hošek, Petr Kočár, Antonín Majer, Daniel Makowiecki, Linda Scott Cummings, Zdenka Šůvová, Ivo Světlík, Dimitri Vendenberghé, Jasper Van Nieuland, Chad L. Yost, and Mirosława Zabilska-Kunek, "Raně středověké areál v Roztokách z pohledu ekofaktů," *PA* 104 (2013), 59–147.
- Kunčer, Dragana, "Portret dalmatinskog episkopa krajem 6. veka," *Istorijski časopis* (2011), 13–24.

- Kuokkanen, Rauna, "Indigenous economies, theories of subsistence, and women. Exploring the social economy model for indigenous governance," *American Indian Quarterly* 35, no. 2 (2011), 215–40.
- Kurila, Laurynas, "Senieji Rytų Lietuvos pilkapių plėšikai," *LA* 34 (2008), 43–58.
- Kurila, Laurynas, "Socialinis statusas ir lytis: Geležies amžiaus Rytų Lietuvos socialinės organizacijos analizė," *LA* 35 (2009), 153–92.
- Kurila, Laurynas, "Social classes in the Iron Age east Lithuania: an attempt of identification in the mortuary record," *Interarchaeologia* 4 (2015), 45–63.
- Kurila, Laurynas, "East Lithuanian barrows—burial in the cradle of Lithuanian tribes," in *A Hundred Years of Archaeological Discoveries in Lithuania*, eds. G. Zabiela, Z. Baubonis and E. Marcinkevičiūtė (Vilnius, 2016), 192–207.
- Kurila, Laurynas and Vida Kliaugaitė, "Baliulių pilkapyno tyrinėjimai," *Lietuvos lokaliniai tyrimai. Archeologija* (2017), 1–27.
- Kurnatowska, Zofia, "Structure sociale des Slavènes à la lumière d'une analyse de l'habitat," *Balkanoslavica* 1 (1972), 87–96.
- Kurnatowska, Zofia, "Uwagi na temat agrotechniki słowiańskiej w drugiej połowie I. tysiąclecia n. e.," *Prace i materiały Muzeum Archeologicznego i Etnograficznego w Łodzi* 25 (1978), 221–29.
- Kurti, Dilaver, "Gjurmë të kulturës së hershme Shqiptare ne Mat," *Iliria* 1 (1971), 269–74.
- Kyrou, Adonis K., "Periplaneseis hagion leipsanon kai mia agnoste kastropoliteia ston Argoliko," *Peloponnesiaka* 21 (1995), 97–118.
- La Salvia, Vasco, *Iron Making During the Migration Period. The Case of the Lombards*, BAR International Series 1715 (Oxford, 2007).
- La Salvia, Vasco, "Analisi metallografiche di una 'spada di tessitura' e di altri oggetti in ferro provenienti dalle necropoli di epoca longobarda di Kajdacs-Homokbánya e Tamási-Csikólegelő (Ungheria)," *Temporis signa. Archeologia della tarda antichità e del medioevo* 3 (2008), 183–97.
- La Salvia, Vasco, Lubomir Mihok, István Bóna and János Gömöri, "Metallographic analysis of 'Lombard' swords," in *Archaeometallurgy in the Central Europe*, eds. L. Mihok and E. Mirošayová (Nitra/Košice, 1999), 180–86.
- Labuda, Gerard, *Pierwsze państwo słowiańskie. Państwo Samona* (Poznań, 1949).
- Laiou, Angeliki E., and Cécile Morrisson, *The Byzantine Economy* (Cambridge/New York, 2007).
- Lang, Valter. *Muistne Rävåla. Muistised, kronoloogia ja maaviljeluslike asustuse kujunemine Loode-Eestis, eriti Piritajõe alamjooksu piirkonnas*, Tõid arheoloogia alalt 4,2 (Tallinn, 1996).
- Lang, Valter, Helena Kaldre, Marge Konsa, Margot Laneman and Helen Vaab, "Fossil fields of Ilmandu and Muraste, north Estonia," *AVE* (2003), 72–83.

- Lapushnian, V.L. and I.A. Rafalovich, "Raboty Reutskoi ekspedicii," in *Arkheologicheskie otkrytiia 1972 goda*, ed. B.A. Rybakov (Moscow, 1973), 410–11.
- Laskaris, Nikolaos G., *Monuments funéraires paléochrétiens (et byzantins) de Grèce* (Athens, 2000).
- Łaszczewska, Teresa, "Polska środkowa w okresie wędrówek ludów i w początkach wczesnego średniowiecza," *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi* 22 (1975), 293–330.
- László, Gyula, "Avarokori pásztorkészségeink," *AE* 1 (1940), 91–98.
- László, Gyula, *Etudes archéologiques sur l'histoire de la société des Avars*, *Archaeologia Hungarica* 34 (Budapest, 1955).
- László, Gyula, "Les monuments de la période byzantine-moyenne en Hongrie," *CCARB* 16 (1969), 203–08.
- László, Gyula, "Avar fejedelem sírja bócsán," *Cumania* 4 (1976), 89–108.
- Laul, Silvia, "Die Entwicklungsetappen und Chronologie der Steingräber in Estland," in *Die Verbindungen zwischen Skandinavien und Ostbaltikum aufgrund der archäologischen Quellenmaterialen. I. Symposium der sowjetestnischen und schwedischen Archäologen, Tallinn 12.–15. Oktober 1982*, eds. A. Loit and J. Selirand (Uppsala, 1985), 67–82.
- Lazarenko, Igor, "Plomba na Areobind, eparkh i komerkiarii ot VI vek," in *Bălgariia, bălgarite i Evropa. Mit, istoriia, săvremie. IV (Dokladi ot Mezhdunarodna konferenciia v pamet na prof. d.i.n. Iordan Andreev "Bălgariia, zemia na blazheni ...", V. Tărnovo, 29–31 oktombri 2009 g.)*, eds. S. Demendzhieva and D. Dimitrov (Veliko Tărnovo, 2011), 346–54.
- Lăzărescu, Vlad-Andrei, "Așezarea din secolul al VI-lea p. Chr.," in *Cercetări arheologice preventive la Florești-Polus Center, jud. Cluj (2007)*, eds. S. Mustață, F. Gogâltan, S. Cociș, and A. Ursuțiu (Cluj-Napoca, 2009), 319–417.
- Lăzărescu, Vlad-Andrei and Vlad Turcu, "Anotimpuri ale morții. Date despre o metodă arheologico-astronomică pentru studierea riturilor funerare antice," *Analele Banatului* 21 (2013), 129–44.
- Lăzărescu-Ionescu, I., Dinu V. Rosetti, Gheorghe Ionescu, Gheorghe Astancăi, and Horia Teodoru, "Săpăturile arheologice din sectorul Curtea Veche," in *București. Rezultatele săpăturilor arheologice și ale cercetărilor istorice din anul 1953* (Bucharest, 1954), 184–261.
- Lazin, Gheorghe and Maria Hep, "Așezări și descoperiri arheologice din secolele V–IX în județul Satu Mare," *Symposia thracologica* 8 (1990), 79–86.
- Lebedev, Gleb S., "Novye dannye o dlinnykh kurganakh i sopkakh," *Problemy arkheologii i etnografii* 1 (1977), 37–46.
- Leben-Seljak, Petra, "Antropološka analiza poznoantičnega grobišča na Vrajku v Gorenjem Mokronogu," *AV* 54 (2003), 397–420.

- Leciejewicz, Lech, "Zakhidna zona krystalizatsii rann'oslov'ians'koi kul'tury," in *Etnokul'turni protsesy v Pivdenno-Skhidn'yi Evropi v I tysiacholitti n.e. Zbirnyk naukovykh prats'*, eds. R.V. Terpylovs'kyi, N.S. Abashina, L.E. Skyba and V.I. Ivanovs'kyi (Kiev/L'viv, 1999), 115–22.
- Lemerle, Paul, *Les plus anciens recueils des Miracles de Saint Démétrius et la pénétration des Slaves dans les Balkans. II: Commentaire* (Paris, 1981).
- Leont'ev, Andrei E., and Evgenii N. Nosov, "Osteuropäische Verkehrswege und Handelsbeziehungen im Zeitraum vom Ende des 8. bis zum 10. Jahrhundert," in *Die Rus' im 9.–10. Jahrhundert. Ein archäologisches Panorama*, ed. N.A. Makarov (Mainz, 2017), 390–409.
- Leshchenko, V. Iu., "Novoe vizantiiskoe bliudo iz Verkhnego Prikam'ia," *Soobshcheniia Gosudarstvennogo Ermitazha* 31 (1970), 49–50.
- Leshchinskaia, N.A., "Issledovaniia Tat-Boiarskogo mogil'nika," in *Arkheologicheskie otkrytiia Urala i Povolzh'ia*, ed. N.A. Nagovicin (Izhevsk, 1991), 61–64.
- Leube, Achim, "Germanische Völkerwanderungen und ihr archäologischer Fundniederschlag. Slawisch-germanische Kontakte im nördlichen Elb-Oder-Gebiet. Ein Forschungsbericht (II)," *EAZ* 36 (1996), 259–98.
- Levak, Maurizio, "Primates populi Istrię provincie na Rižanskom saboru," *Acta Histriae* 13, no. 1 (2005), 87–96.
- Levinskaia, I.A. and S.R. Tokhtas'ev, "Agafii Mirineiskii," in *Svod drevneishikh pis'mennykh izvestii o slavianakh*, eds. L.A. Gindin, S.A. Ivanov and G.G. Litavrin, vol. 1 (Moscow, 1991), 292–31.
- Levinskaia, I.A. and S.R. Tokhtas'ev, "Menandr Protektor," in *Svod drevneishikh pis'mennykh izvestii o slavianakh*, L.A. Gindin, S.A. Ivanov and G.G. Litavrin, vol. 1 (Moscow, 1991), 311–56.
- Levko, O.N. "Raskopki gorodishch u der. Kiseli (Dymokury) Tolochinskogo raiona i u d. Cherkasovo Orshanskogo r-na Vitebskoi obl.," in *Rannie slaviane belorusskogo Podneprov'ia i Podvin'ia. K 80-letiiu L.D. Pobolia*, ed. O.N. Levko (Minsk, 2003), 182–208.
- Liashkevich, E.A. and Alena F. Kasiuk, "Gorodishche Bancerovshchina: istoriia issledovaniia i predvaritel'nye itogi," in *Slaviane na territorii Belarusi v dogosudarstvennyi period. K 90-letiiu so dnia rozhdeniia doktora istoricheskikh nauk, professora Leonida Davydovicha Pobolia*, ed. O.N. Levko and V.G. Belevic, vol. 2 (Minsk, 2016), 189–220.
- Liebeschuetz, J.H.W.G., "The government of the late Roman city, with special reference to Thessaloniki," in *Byzantine Macedonia: Identity, Image, and History. Papers from the Melbourne Conference, July 1995*, eds. J. Burke and R. Scott, *Byzantina Australiensia* 13 (Melbourne, 2000), 116–27.
- Lifanov, Nikolai A., "Ot gipotezy k fantazii (Zhikh M. I. Rannie slaviane v Srednem Povolzh'e. SPb; Kazan': Vestfalika, 2011. 90 s.)," *Rossiiskii arkheologicheskii ezhegodnik*, no. 2 (2012), 749–57.

- Ligi, Priit, "National romanticism in archaeology: the paradigm of Slavonic colonization in north-west Russia," *Fennoscandia archaeologica* 10 (1993), 31–39.
- Ligi, Priit, "Active Slavs' and 'passive Finns'. A reply," *Fennoscandia archaeologica* 11 (1994), 104–12.
- Ligi, Priit, "Ühiskondlikest oludest Eesti alal hilispronksi- ja rauaaajal," *Muinasaja teadus* 3 (1995), 182–270.
- Likhachev, Nikolai P., "Datirovannyye vizantiiskie pečati," *Izvestiia Rossiiskoi Akademii istorii material'noi kul'tury* 3 (1924), 153–224.
- Lilčić, Viktor, "Ranokhristijanska zasvodena grobnica kaj s. Orman, Skopsko, i pregled na drugite makedonski naodi," *MAA* 7–8 (1981), 143–51.
- Lillak, Anti and Heiki Valk, "Archaeological trial excavations on the Rõuge hill fort, south-east Estonia," *AVE* (2008), 72–81.
- Lindner, Rudi, "What was a nomadic tribe?" *Comparative Studies in Society and History* 24 (1982), 689–711.
- Lipin, V.B., "Obrazcy permskogo zverinogo stilia iz rannesrednevekovogo poseleniia Pasa-Shor (Ust'-Kulom I) na verkhnei Vychegde," in *Dukhovnaia kul'tura. Problemy i tendencii razvitiia. Vserossiiskaia nauchnaia konferenciia, 11–14 maia 1994 g. Tezisy dokladov*, ed. L.A. Maksimova (Syktyvkar, 1994), 28–29.
- Lipińska, Aleksandra, "Wczesnośredniowieczna półziemianka w Kotowie, pow. Nowy Tomyśl," *FAP* 12 (1961), 216–19.
- Lipking, Iu. A., "Mogil'niki tret'ei chetverty I tys. n. e. v Kurskom Posem'e," in *Rannesrednekovyye vostochnoslavianskie drevnosti. Sbornik statei*, ed. P.N. Tret'iakov (Leningrad, 1974), 136–52.
- Lipp, Vilmos, "A fenéki sírmező," *Archaeologiai Közlemények* 14 (1886), 137–59.
- Litavrin, Gennadii G., "Etnosocial'naia struktura slavianskogo obshchestva v epokhu poseleniia na Balkanakh (VI–VII vv.)," in *Etnosocial'naia i politicheskaia struktura rannefeodal'nykh slavianskikh gosudarstv i narodnostei*, ed. G.G. Litavrin (Moscow, 1987), 33–44.
- Lityńska, Maria, "Szczałki roślin z II–III i VI–VII wieku n.e. znalezione na stanowisku I w Wyszemborku koło Mrągowa," *Światowit* 37 (1993), 137–46.
- Liubichev, M.V., "Ranneslavianskie selishche na Severskom Donce," *Vestnik Kharkovskogo universiteta. Istoriiia* 27 (1993), 30–35.
- Liubichev, M.V., "Novi pam'iatky pen'kivs'koi kul'tury u verkhniy techii Sivers'kogo Dintsia," *ALLU* (2001), no. 2, 113–16.
- Liubichev, Mikhail V., and Kirill Myzgin, "Migration-period culture and changes in the East European forest-steppe zone," in *The Migration Period between the Oder and the Vistula*, ed. A. Bursche, J. Hines and A. Zapolska, East Central and Eastern Europe in the Middle Ages, 450–1450 59 (Leiden/Boston, 2020), 731–70.
- Loboda, I.I., "Novye rannesrednekovyye mogil'niki v Iugo-Zapadnom Krymu (Bakhchisaraiskii raion)," *SA*, no. 2 (1976), 135–47.

- Loboda, I.I. and M.Ia. Choref, "Vnov' otkrytyi v Bel'bekskoi doline rannesrednevekovoii mogil'nik," *KSIA* 140 (1974), 100–02.
- Lodowski, Jerzy, *Sądowel we wczesnym średniowieczu* (Warsaw, 1972).
- Lodowski, Jerzy, *Dolny Śląsk na początku średniowiecza (VI–X w.). Podstawy osadnicze i gospodarcze* (Wrocław, 1980).
- Lodowski, Jerzy, "Osada wczesnośredniowieczna z VI–VII w. w Chwałkowie, woj. Wałbrzych," *Silesia antiqua* 23 (1981), 149–63.
- Loma, Aleksandar, "Procopius about the supreme god of the Slavs (*Bella* VII 14.23): two critical remarks," *ZRVI* 41 (2004), 67–70.
- Lopatin, Nikolai V., "Problemy i perspektivy izucheniiia drevnostei tipa Tushemli-Bancerovshchiny," in *Pamiatniki zheleznogo veka i srednevekov'ia na verkhnei Volge i Verkhnem Podvin'e*, ed. V.L. Ianin and V.V. Sedov (Kalinin, 1989), 14–24.
- Lopatin, Nikolai V., "Keramicheskii kompleks verkhnego sloia gorodishcha Bancerovshchina," *Archaeoslavica* 2 (1993), 63–85.
- Lopatin, Nikolai V., "O gorodishchakh V–VII vv. v Verkhnem Podneprov'e i na Severo-Zapade Rossii," *KSIA* 250 (2018), 293–306.
- Lőrinczy, Gábor, "A Szegvár-Oromdűlői kora avarkori temető 1. sírja," *MFME*, no. 2 (1984–1985), 127–53.
- Lőrinczy, Gábor, "Kelet-európai steppei népesség a 6–7. századi Kárpát-medencében. Régészeti adatok a Tiszántúl kora avar kori betelepüléséhez," *MFMESSA* 4 (1998), 343–72.
- Lőrinczy, Gábor, "Kelet-európai steppei népesség a 6–7. századi Kárpát-medencében," in *A Kárpát-medence és a steppe*, ed. A. Márton, Magyar Őstörténeti Könyvtár 14 (Budapest, 2001), 41–47.
- Lőrinczy, Gábor and Péter Somogyi, "Archäologische Aussagen zur Geschichte der Großen Ungarischen Tiefebene östlich der Theiß im 6. und 7. Jahrhundert. Grab 33 des frühawarenzeitlichen Gräberfeldes von Szegvár-Oromdűlő," in *Lebenswelten zwischen Archäologie und Geschichte. Festschrift für Falko Daim zu seinem 65. Geburtstag*, eds. J. Drauschke et al., Monographien der Römisch-Germanischen Zentralmuseums, 150.1 (Mainz, 2018), 231–50.
- Lőrinczy, Gábor and Péter Straub, "Újabb adatok az avar kori szűrőkanalak értékeléséhez I," *MFMESSA* 9 (2003), 171–81.
- Lőrinczy, Gábor and Péter Straub, "Újabb adatok az avar kori szűrőkanalak értékeléséhez II," *MFMESSA* 10 (2004), 305–37.
- Lőrinczy, Gábor and Péter Straub, "Alpi típusú övgarnitúra a szegvár-oromdűlői 81. sírból," *ZM* 14 (2005), 137–67.
- Lőrinczy, Gábor and Péter Straub, "Újabb adatok az avari kori szűrőkanalak értékeléséhez III," *MFMESSA* 11 (2005), 127–45.

- Łosiński, Władysław, "Zur Besiedlungsdynamik Pommerns im frühen Mittelalter," *SlAnt* 31 (1988), 1–22.
- Loskotová, Zuzana, "Lombard burial grounds and graves of social elites north of the Middle Danube in the light of recent research," in *Macht des Goldes, Gold der Macht. Herrschafts- und Jenseitsrepräsentation zwischen Antike und Frühmittelalter im mittleren Donaauraum. Akten des 23. internationalen Symposiums der Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donaauraum, Tengelic, 16.–19. 11. 2011*, eds. M. Hardt and O. Heinrich-Tamáška, Forschungen zur Spätantike und Mittelalter 2 (Weinstadt, 2013), 321–38.
- Lõugas, Vello, "Das mitteleisenzeitliche Steingrab von Lehmja Loo in der Nähe von Tallinn," in *Honos Ella Kivikoski*, eds. P. Sarvas and A. Siiriäinen (Helsinki, 1973), 117–31.
- Lõugas, Vello, "Archaeological excavations on the settlement site of Jõelähtme," *AVE* (1997), 156–60.
- Lovász, Emese, "Gepida haz Egerlövön," *A Hermán Ottó Múzeum Évkönyve* 25–26 (1986–1987), 127–40.
- Lozny, Ludomir R., *Prestate Societies of the North Central European Plains, 600–900 CE* (New York, 2013).
- Lozny, Ludomir R., "Sickle, hammer, and trowel: theory and practice of archaeology under Communism," in *Archaeology of the Communist Era. A Political History of Archaeology of the 20th Century*, ed. L.R. Lozny (Cham, 2016), 9–58.
- Lübke, Christian, and Matthias Hardt (eds.), 400–1000. *Vom spätantiken Erbe zu den Anfängen der Romanik*, Handbuch zur Geschichte der Kunst in Ostmitteleuropa 1 (Berlin/Munich, 2017).
- Lukin, Pavel V., "'Starcy' ili 'starshie'? O terminologii slavianskoi 'plemennoi znati,'" *Slavianovedenie*, no. 2 (2010), 12–30.
- Lutovský, Michal, "Der Verlauf der Zentralisierungsprozesse im frühmittelalterlichen Böhmen," in *Zentralisierungsprozesse und Herrschaftsbildung im frühmittelalterlichen Ostmitteleuropa*, ed. P. Sikora (Bonn, 2014), 93–126.
- L'vova, Zlata A., "Varvarskaia grupa veshchei iz Pereshchepinskogo kompleksa," *MAIET* 4 (1994), pp. 257–70.
- L'vova, Zlata A., "Veshchi iz Pereshchepino, vypolnennye v vizantiiskoi masterskoi dlia kochevnikov," in *Vizantiia i vizantiiskie tradicii. Sbornik nauchnykh trudov*, ed. V.N. Zalesskaia (St. Petersburg, 1996a), 19–39.
- L'vova, Zlata A., "Veshchi kochevničeskogo kruga iz Pereshchepinskogo sokrovishcha," *Bolgarskii ezhegodnik* 2 (1996b), 12–35.
- L'vova, Zlata A., "Nabor predmetov vooruzheniia i snariaženiia znatnogo voia iz Pereshchepinskogo kompleksa," *ASGE* 33 (1998), 110–22.



- L'vova, Zlata A. and Boris I. Marshak, "Poslednee popolnenie pereshchepinskogo sokrovishcha ego vladel'cem," *MAIET* 6 (1997), 490–98.
- Machajewski, Henryk, "Sytuacja osadnicza w dorzeczu dolnej Parsęty w czasie od I w. p. n. e. do V/VI w. n. e.," *FAP* 30 (1979), 26–36.
- Machajewski, Henryk, "Skandynawskie elementy kulturowe na Pomorzu Zachodnim z okresu wędrówek ludów (2. połowa IV w.-początek VI w.)," *PArch* 40 (1992), 71–96.
- Machajewski, Henryk, "Zur Erforschung vom kulturellen und siedlungsgeschichtlichen Wandel in Wespommern vom 1. Jh. v. u. Z. bis zum 5./6. u. Z.," *EAZ* 40 (1999), 241–62.
- Machajewski, Henryk, "Południowo-zachodnia strefa basenu Morza Bałtyckiego u schyłku starożytności," in *Archeologia o początkach Słowian. Materiały z konferencji, Kraków, 19–21 listopada 2001*, eds. P. Kaczanowski and M. Parczewski (Cracow, 2005), 181–202.
- Machinskii, Dmitrii A. and Viacheslav S. Kuleshov, "Severnye narody sere diny IV-pervoi poloviny VI v. v *Getica* Iordana," in *Ladoga i Gleb Lebedev. Chteniia pamiati Anny Machinskoi, Staraia Ladoga, 21–23 dekabria 2002 g. Sbornik statei*, ed. D.A. Machinskii (St. Petersburg, 2003), 26–72.
- Mackensen, Michael, "Mediterrane Sigillata, Lampen und Amphoren," in *Invillino-Ibligo in Friaul I. Die römische Siedlung und das spätantik-frühmittelalterliche Castrum*, ed. V. Bierbrauer, Münchner Beiträge zur Vor- und Frühgeschichte 33 (Munich, 1987), 229–65.
- Mackensen, Michael, "Amphoren und Spatheia von Golemannovo Kale," in *Die spätantiken Befestigungen von Sadovec (Bulgarien). Ergebnisse der deutsch-bulgarisch-österreichischen Ausgrabungen 1934–1937*, ed. S. Uenze, Münchner Beiträge zur Vor- und Frühgeschichte (Munich, 1992), 239–54.
- Maculevich, Leonid A, "Vizantiiskii antik v Prikam'e," in *Arkheologicheskie pamiatniki Urala i Prikam'ia*, ed. P.N. Tret'iakov, Materialy i issledovaniia po arkheologii SSSR 21 (Moscow/Leningrad, 1940), 139–58.
- Maczyńska, Magdalena, "Die Endphase der Przeworsk-Kultur," *EAZ* 39, no. 1 (1998), 65–99.
- Maczyńska, Magdalena, "O dwóch modelach kulturowych—późnorzymskim i wczesnośredniowiecznym," in *Cień Światowita, czyli pięć głosów w sprawie etnogenezy Słowian*, ed. A. Kokowski (Lublin, 2002), 71–83.
- Madaras, László, "Az avar falu," in *Régészeti ásatások Tiszafüred-Morotvaparton*, eds. L. Tálás and L. Madaras, Szolnok Megyei Múzeumi Adattár 32 (Szolnok, 1991), 227–316.
- Madaras, László, "Lehetett-e a kunbábonyi sír egy kagán nyugvóhelye?" in *Beatus homo qui invenit sapientiam. Ünnepi kötet Tomka Péter 75. születésnapjára*, eds. T. Csécs and M. Takács (Győr, 2016), 429–36.

- Madgearu, Alexandru, *Continuitate și discontinuitate culturală la Dunărea de Jos în secolele VII–VIII* (Bucharest, 1997).
- Madgearu, Alexandru, “Two mutinies against the center in the province of Scythia,” *Revue des études sud-est-européennes* 39, nos. 1–4 (2001), 5–17.
- Madgearu, Alexandru, “Un eșalon logistic din armata bizantină din secolul al VI-lea: quaestura exercitus Iustiniani,” *Gândirea militară românească* 20, no. 4 (2009), 189–94.
- Madyda-Legutko, Renata, Jacek Poleski and Marek Krąpiec, “Stan nad geografią osadnictwa w górnym dorzeczu Wisły u schyłku starożytności i na początku średniowiecza,” in *Archeologia o początkach Słowian. Materiały z konferencji, Kraków, 19–21 listopada 2001*, eds. P. Kaczanowski and M. Parczewski (Cracow, 2005), 307–52.
- Magdič, Andrej, “New archaeological research in the Middle Ages in the Slovenian regions of Pomurje and Podravje. The issue of settlement continuity and the development of agrarian activities,” in *Srednjovjekovna naselja u svjetlu arheoloških izvora. Zbornik radova drugog međunarodnog znanstvenog skupa srednjovjekovne arheologije Instituta za arheologiju Zagreb, 2.–3. lipnja 2015.*, eds. T. Sekelj-Ivančan, T. Tkalčec, S. Krznar and J. Belaj, *Zbornik Instituta za arheologiju* 6 (Zagreb, 2017), 441–58.
- Mägi, Marika, “The mortuary house at Lepna on southern Saaremaa,” *AVE* (2003), 45–60.
- Mägi, Marika, “Mortuary houses in Iron Age Estonia,” *EAA* 9, no. 2 (2005), 93–131.
- Mägi, Marika, “Changing connections, changing society. Burial rites on Iron-Age Saaremaa,” in *Transformatio Mundi. The Transition from the Late Migration Period to the Early Viking Age in the East Baltic*, ed. M. Bertašius (Kaunas, 2006) 51–64.
- Mägi, Marika. *The Viking Eastern Baltic* (Leeds, 2019).
- Magnus, Bente, “Tanker omkring et funnkart,” in *Samfunn, symboler og identitet. Festskrift til Gro Mandt på 70-årsdagen*, eds. R. Barndon and G. Mandt, Nordisk 3 (Bergen, 2006), 399–410.
- Magnus, Bente, “Die Frau aus Grab 84 von Szentes-Nagyhegy und die gleicharmigen Relieffibeln der Völkerwanderungszeit,” *CAH* (2007), 175–93.
- Măgureanu, Andrei, “O aplică avară descoperită la Budureasca (județul Prahova),” *Argesis* 14 (2005), 189–202.
- Măgureanu, Andrei, “Observații privind semnificația unor descoperiri din spațiul extracarpatic (sec. VI–VII p. Chr.),” *Mousaios* 13 (2008), 173–90.
- Măgureanu, Andrei, “About power in the sixth-seventh century in the extra-Carpathian area,” in *Potestas et communitas. Interdisziplinäre Beiträge zu Wesen und Darstellung von Herrschaftsverhältnissen im Mittelalter östlich der Elbe*, eds. A. Paroń, S. Rossignol, B. Szymon Szmoniewski and G. Vercamer (Warsaw/Wrocław, 2010), 73–86.

- Măgureanu, Andrei, "Așezarea de la Târgșoru Vechi. Pretext pentru unele considerații referitoare la cercetarea așezărilor din secolele VI–VII dintre Carpați și Dunăre," in *Între stepă și imperiu. Studii în onoarea lui Radu Harhoiu*, eds. A. Măgureanu and E. Gáll (Bucharest, 2010), 253–70.
- Măgureanu, Andrei, "Considerații privind o piesă de bronz descoperită la Budureasca," *SCIVA* 63, nos. 3–4 (2012), 313–20.
- Măgureanu, Andrei, "Expresivitatea așezărilor în discuția despre identitatea elitelor (secolele VI–VII)," *SCIVA* 66, nos. 3–4 (2015), 265–86.
- Măgureanu, Andrei and Bogdan Ciupercă, "The 6th–8th centuries metallurgical activity from Budureasca Valley. The moulds," *AMN* 41–42, no. 1 (2004–2005), 291–318.
- Măgureanu, Andrei and Bartłomiej Szymon Szmoniewski, "Domestic dwellings in Moldavia and Wallachia in the initial phases of the early Middle Ages," *AAC* 38 (2003), 111–36.
- Mailis, A., "The early Christian basilica and the posterior cemetery at Mariolata, Phokis. Transformations of a site at the periphery of the Great Isthmus Corridor Route," *AT* 19 (2001), 303–21.
- Makarov, Nikolai A., "O nekotorykh kompleksakh serediny i tret'eï chetverti I tysiacheletia n. e. v iugovostochnom Prionezh'e i na r. Sukhone," *KSIA* 183 (1986), 23–32.
- Makiewicz, Tadeusz, "Kwestia ciągłości pomiędzy starożytnością a średniowieczem w Polsce w świetle najnowszych badań językoznawczych. Refleksje archeologa," *SlAnt* 49 (2008), 9–43.
- Makushnykau, A.A., "Osnovnye etapy razvitiia letopisnogo Gomiia (po serediny XIII v.)," in *Problemy arkheologii Iuzhnoi Rusi. Materialy istoriko-arkheologicheskogo seminara "Chernigov i ego okruġa v IX–XIII vv."*, *Chernigov*, 26–28 sent. 1988 g., eds. P.P. Tolochko et al. (Kiev, 1990), 56–62.
- Makushnykau, A.A., "Poselenie vtoroi poloviny I tys. n. e. bliz d. Nosovichi v Nizhnem Posozh'e," *HAZ* 5 (1994), 227–37.
- Makushnykau, A.A., "Issledovanie slavianskikh kurganov u derevni Sharpilovka v Belorussii," in *Arkheologicheskie otkrytiia 2001 g.*, ed. V.V. Sedov (Moscow, 2002), 514–16.
- Makushnykau, A.A., *Gomel'skoe Podneprov'e v V–seredine XIII v.: social'no-ekonomicheskoe i etnokul'turnoe razvitie* (Homel, 2009).
- Makushnykau, A.A., "Kolochinskaia kul'tura v Gomel'skom Podneprov'e i smeniiaushchie ee pamiatniki VIII–IX vv.," *KSIA* 235 (2014), 364–81.
- Malamut, Elisabeth, "Thessalonique 830–904," in *Zwischen Polis, Provinz und Peripherie. Beiträge zur byzantinischen Geschichte und Kultur*, eds. L.M. Hoffmann and A. Monchizadeh, *Mainzer Veröffentlichungen zur Byzantinistik* 7 (Wiesbaden, 2005), 159–90.
- Malenko, Vlado, "Novi arkeoloshki naodi na lokalitetite 'Kozluk', 'Gabavci' i 'Sv. Erazmo'," *MAA* 2 (1976), 219–35.

- Malenko, Vlado, "Ranosrednovjekovna materijalna kultura vo Okhrid i Okhridsko," in *Okhrid i Okhridsko niz istorijata*, ed. M. Apostolski, vol. 1 (Skopje, 1985), 269–315.
- Malinowski, Tadeusz, "Problem pozyskiwania bursztynu w pradziejach i we wczesnym średniowieczu na ziemiach polskich," in *Surowce mineralne w pradziejach i we wczesnym średniowieczu Europy Środkowej*, ed. B. Gediga (Wrocław, 1988), 189–202.
- Mandel, Mati, "Über die Bodendenkmäler von Ehmja," *ENSV* 32, no. 4 (1983), 300–02.
- Mandel, Mati, "Eisenzeitliche Grabformen und Bestattungsbräuche auf dem westestnischen Festlande," in *Archaeology East and West of the Baltic. Papers from the Second Estonian*, ed. I. Jansson (Stockholm, 1995), 11–21.
- Mandel, Mati, *Läänemaa 5.–13. sajandi kalmed*, Tõid ajaloo alalt 5 (Tallinn, 2003).
- Maneva, Elica, "Nekropola od krajot na antikata od Herakleja Linkestis," *MAA* 10 (1985–1986), 161–81.
- Maneva, Elica, "Nekoi aspekti za problematikata na ranosrednovjekovna kulturna grupa Komani-Krue i nejzinoto prisustvo vo Makedonija," *Izvornik* 1–2 (1996), 11–24.
- Maneva, Elica, "La tombe 23 de Saint-Erasme-Ohrid," in *Homage to Milutin Garašanin*, ed. N. Tašić (Belgrade, 2006), 607–14.
- Mango, Marlia Mundell, "Die drei byzantinischen Silbergefäße und der Löffel. Bemerkungen," in *Der Silberschatz von Martynovka (Ukraine) aus dem 6. und 7. Jahrhundert*, eds. L.V. Pekars'ka and D. Kidd (Innsbruck, 1994), 36–42.
- Mango, Marlia Mundell, "The archaeological context of finds of silver in and beyond the Eastern Empire," in *Radovi XIII. Međunarodnog Kongresa za starokršćansku arheologiju. Split-Poreč (25.9.–1.10. 1994)*, eds. N. Cambi and E. Marin, vol. 2, *Studi di antichità Cristiana* 54 (Vatican/Split, 1998), 207–52.
- Mano-Zisi, Đorđe, "Iskopavanja na Carichinom Gradu 1955 i 1956 godine," *Starinar* 7–8 (1958–1959), 31–28.
- Marano, Yuri A., "Le sepolture privilegiate della Grecia settentrionale protobizantina," in *L'Illyrie méridionale et l'Épire dans l'Antiquité. Actes du VI<sup>e</sup> colloque international de Tirana (20–23 mai 2015)*, eds. J.-L. Lamboley, L. Përzhita and A. Skenderaj, vol. 3, *Illyrie méridionale et l'Épire dans l'Antiquité* 6 (Paris, 2018), 879–92.
- Mărculeț, Vasile, "Un posibil quaestor Justinianus exercitus: Germanus, fiul lui Dorotheus," *Tyragetia* 11, no. 1 (2017), 227–34.
- Mare, Mircea, *Banatul între secolele IV–IX. Meșteșuguri și ocupații tradiționale* (Timișoara, 2005).
- Marić, Zdravko, "Kasnoantička nekropola na praistorijskoj gradini u Koritima kod Duvna," in *Simpozijum "Predslavenski etnički elementi na Balkanu u etnogenezi južnih Slovena", održan 24–26. oktobra 1968 u Mostaru*, ed. A. Benac (Sarajevo, 1969), 239–43.
- Marin, Emilio, "Les nécropoles de Salone," in *Actes du XI<sup>e</sup> Congrès international d'archéologie chrétienne. Lyon, Vienne, Grenoble, Genève et Aoste*

- (21–28 septembre 1986), eds. N. Duval, F. Baritel and Ph. Pergola, vol. 2, *Studi di antichità cristiana* 41 (Rome, 1989), 1227–41.
- Marin, Emilio, Nancy Gauthier, Françoise Prévot, Jean-Pierre Caillet, Noël Duval and Denis Feissel, *Inscriptions de Salone chrétienne, IV<sup>e</sup>–VII<sup>e</sup> siècles*. Collection de l'École Française de Rome 194.4 (Rome/Split, 2010).
- Marki, Euterpi, "Anaskaphe Louloudion," *AEMT* 9 (1995), 195–201.
- Marki, Euterpi, "Deux tombeaux monumentaux protobyzantins récemment découverts en Grèce du nord," *CA* 45 (1997), 19–24.
- Marki, Euterpi, "Louloudies," *AEMT* 11 (1997), 289–96.
- Marki, Euterpi, "Kamarotos taphos me toichographies apo ten Pylaia," in *Aphieromaste mneme tou Sotere Kissa*, eds. Ch. Mavropoulou-Tsioumi and E. Kyriakoudes (Thessaloniki, 2001), 273–81.
- Marki, Euterpi, *He nekropole tes Thessalonikes stous hysterioromaikous kai palaiochristianikous chronous (mesa tou zou heos mesa tou sou ai. m. Ch.)*, *Demosieumata tou Archaialogikou Deltiou* 95 (Athens, 2006).
- Marki, Euterpi and Sophia Akrivopoulou, "Anaskaphe agrepales sto Paliokastro Oraiokastrou," *AEMT* 17 (2003), 281–98.
- Marki, Euterpi, Evangelia Angelkou and Maria Cheimonopoulou. "Ta lychnaria tou episkopikou sykrotematos tou Louloudion." In D. Papanikola-Bakirtzis and D. Kousoulakou (eds), *Keramike tes hysteres archaioteta apo ton elladiko choro (308–708 ai. m. Ch.)*. *Epistemonike synantese, Thessaloniki, 12–16 noembriou 2006*, vol. 1 (Thessaloniki Demosieumata Archaialogikou Institutoutou Makedonikon kai Thrakikon Spoudon, 2010), pp. 208–16.
- Marković, Nemanja and Sonja Stamenković, "Antler workshop in Caričin Grad (Iustiniana Prima): reconstruction of the technological process," in *Close to the Bone. Current Studies in Bone Technologies*, ed. S. Vitezović (Belgrade: Institute of Archaeology, 2016), 218–25.
- Marković, Nemanja, Ana Elena Reuter, and Jago Jonathan Birk, "Bioarkheoloshka istrazhivanja svakodnevnog zhivota u Carichinom Gradu (Justiniana Prima)," *Leskovački zbornik* 59 (2019), 21–44.
- Marosi, Arnold and Nándor Fettich, *Dunapentelei avar sírleletek*, *Archaeologia Hungarica* 18 (Budapest, 1936).
- Marović, Ivan, "Ostava bizantskih zlatnika iz Narone," *Vjesnik za arheologiju i historiju Dalmatinsku* 99 (2006), 235–52.
- Marshak, Boris I., "Serebro za mekha," in *Vizantiiskaia idea. Vizantiia v epokhu Komninov i Paleologov. Sbornik nauchnykh trudov*, ed. V.N. Zaleskaia (St. Petersburg, 2006), 72–82.
- Marti, V. Iu., "Rybozasolochnye vannы Tiritaki," in *Arkheologicheskie pamiatniki Bospora i Khersonesa*, eds. S.A. Zhebelev and V.F. Gaidukevich, *Materialy i issledovaniia po arkheologii SSSR* 4 (Moscow/Leningrad, 1941), 93–95.

- Martin, Max, "Zur Interpretation des langobardischen Gräberfeldes von Várpalota," *Basler Beiträge zur Ur- und Frühgeschichte* 1 (1976), 194–99.
- Martin, Max, "Tauschierte Gürtelgarnituren und -beschläge des frühen Mittelalters im Karpatenbecken und ihre Träger," in *Ethnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis zum 11. Jahrhundert. Symposium Nitra 6. bis 10. November 1994*, D. Bialeková and J. Zábajník (Bratislava, 1996), 63–74.
- Marušić, Branko, "Polačine pri Ferencih, novo zgodnjesrednjeveško najdišče v Istri," *AV* 7 (1956), 305–16.
- Marušić, Branko, "Langobardski i staroslovenski grobovi na Brešču i kod Malih Vrata ispod Buzeta u Istri," *Arheološki radovi i rasprave* 2 (1962), 453–69.
- Marušić, Branko, "Nekropole VII. i VIII. stoljeća u Istri," *AV* 18 (1967), p333–47.
- Marušić, Branko, *Das spätantike und byzantinische Pula* (Pula, 1967).
- Marušić, Branko, "Ranosrednjovjekovna nekropola na Vrhu kod Brkača," *HA* 10, no. 2 (1979), 111–49.
- Marušić, Branko, "La necropoli alto medioevale sul colle Vrh presso Brkač (S. Pancrazio)," *Atti. Centro di ricerche storiche—Rovigno* 15 (1984), 15–47.
- Marvakov, Todor, Martin Giuzelev, and Konstantin Gospodinov, "Spasitelno arheologicheskoprochuvane v granicite na NAAGR 'Starinen Nesebăr', UPI III-278, kv. 6; UPI III-217, kv. 8 i UPI VII-204, kv. 12 po plana na gr. Nesebăr, oblast Burgas," *AOR* (2013), 233–35.
- Marx, Karl, *Grundrisse der Kritiki der politischen Ökonomie* (Berlin, 1953).
- Marzaliuk, Ihar A., "Novyia krynicy pa gistoryi slavianskaga rassialennia u magileuskim Padniproiu i Pasozhzi," *HAZ* 26 (2011), 97–118.
- Masek, Zsófia, "Száz gepida ház—A rákóczi falvi gepida település szerkezete," in *Hadak útján XXIV. A népvándorlások fiatal kutatóinak XXIV. konferenciája. Esztergom, 2014. november 4–6.*, eds. Cs. Balogh and B. Major, vol. 1 (Budapest/Esztergom, 2015), 407–46.
- Masek, Zsófia, "The transformation of Late Antique comb types on the frontier of the Roman and Germanic world. Early medieval antler combs from Rákóczi falva (County Jász-Nagykun-Szolnok, Hungary)," *Antaeus* 34 (2016), 105–72.
- Mastora, Pelli, "To peri tou apelpisthentos eparchou Marianou psephidoto ste basilike tou Agiou Demetriou Thessalonikes," *Eikonostasion* 7 (2016), 147–71.
- Mastykova, Anna V. and Aleksei V. Plokhov, "Datirovka i proiskhozhdenie steklannykh bus iz mogil'nika u oz. Säezzhee," in *Dialog kul'tur i narodov srednevekovoï Evropy. K 60-letiiu so dnia rozhdeniia Evgeniia Nikolaevicha Nosova*, eds. A.E. Musin and N.V. Khvoshchinskaia (St. Petersburg, 2010), 337–57.
- Matei, Mircea D. and Alexandru Rădulescu, "Şantierul arheologic Udeşti (jud. Suceava)," *Suceava* 3 (1973), 265–89.

- Mathisen, Ralph and Danuta Shanzer (eds), *Romans, Barbarians, and the Transformation of the Roman World. Cultural Interaction and Creation of Identity in Late Antiquity* (Farnham/Burlington, 2011).
- Matijašić, Robert, "Kasiodorova pisma kao izvor za poznavanje kasnoantičke povjesti Istre (Cass. Var. XII 22, 23, 24)," *Zgodovinski časopis* 42, no. 3 (1988), 363–71.
- Matveeva, G.I., "Pamiatniki I tysiacheletia novoi ery levoberezhia r. Beloi," *Arkheologiia i etnografiia Bashkirii* 3 (1968), 113–21.
- Matveeva, G.I., "O proiskhozhdenii imen'kovskoi kul'tury," in *Drevnie i srednevekovie kul'tury Povolzh'ia. Mezhhvuzovskii sbornik*, ed. G.I. Matveeva (Kuibyshev, 1981), 52–73.
- Matveeva, G.I., "Raskopki Staro-Mainskogo gorodishcha," in *Arkheologicheskii otkrytiia 1985 goda*, ed. V.P. Shilov (Moscow, 1987), 191.
- Matveeva, G.I., "Issledovanie Staro-Mainskogo gorodishcha v 1991 godu," in *Arkheologicheskie otkrytiia Urala i Povolzh'ia. Sbornik statei*, ed. V.V. Nikitin (Ioshkar-Ola, 1994), 90–92.
- Matveeva, G.I., *Srednee Povolzh'e v IV–VII vv.: imen'kovskaia kul'tura* (Samara, 2003).
- Matveeva, G.I. and V. Iu Morozov, "Karmalinskoe gorodishche," in *Arkheologicheskie issledovaniia v lesostepnom Povolzhe. Mezhhvuzovskii sbornik statei*, ed. G.I. Matveeva (Samara, 1991), 172–84.
- Matveeva, G.I., A.V. Nabokov, and Anna F. Kochkina, "Issledovanie Staro-Mainskogo gorodishcha," in *Arkheologicheskie otkrytiia Urala i Povolzh'ia*, ed. N.A. Nagovicin (Izhevsk, 1991), 123–24.
- Maul, Birgit, *Frühmittelalterliche Gläser des 5.–7./8. Jahrhunderts n. Chr. Sturzbecher, glockenförmige Becher, Tumbler und Glockentumbler*, Universitätsforschungen zur prähistorischen Archäologie 84 (Bonn, 2002).
- Mauss, Marcel, "Essai sur le don: forme et raison de l'échange dans les sociétés archaïques," *Année sociologique* 1 (1923–2924), 30–186.
- Mauss, Marcel, *The Gift. The Form and Reason for Exchange in Archaic Societies*, transl. W.D. Halls (London/New York, 2001).
- Mavropoulou-Tsioumi, Chrysanthi, *Hagia Sophia. The Great Church of Thessaloniki* (Athens, 2014).
- May, Zoltán and Gergely Szenthe, "Archaeometrical studies on some bronze buckles with portable (handheld) XRF spectroscopy," *AAASH* 66 (2015), 379–86.
- Mazhitov, Niiaz A., "Kurgannyi mogil'nik v derevne Novo-Turbasly," in *Bashkirskii arkheologicheskii sbornik*, eds. A.P. Smirnov and R.G. Kuzeev (Ufa, 1959), 114–42.
- Mazhitov, Niiaz A., *Bakhmutinskaia kul'tura. Etnicheskaia istoriia naseleniia severnoi Bashkirii serediny I tysiacheletia n. e.* (Moscow, 1968).
- McC. Adams, Robert, "Anthropological perspectives on ancient trade," *Current Anthropology* 15 (1974), 239–58.

- McCormick, Michael, *Origins of the European Economy. Communications and Commerce, A.D. 300–900* (Cambridge, 2001).
- McCormick, Michael, “Complexity, chronology and context in the early medieval economy,” *Early Medieval Europe* 12, no. 3 (2003), 307–23.
- Medović, A., “Gamzigrad ratari—dva koraka napred, jedan korak nazad,” *RVM* 50 (2008), 151–73.
- Medvedev, A.M., *Verkhnee Poneman'e v zheleznom veke i rannem srednevekov'e* (Minsk, 2011).
- Meixner, Ivo, “Nepoznati novac gepidskog kralja Kunimunda,” *Numizmatičke vijesti* 6–7 (1956), 4–5.
- Mel'nichuk, A.F., R.F. Vil'danov, and A.V. Goldobin, “Rannesrednekovyi vostochnyi monetnyi kompleks zhertvennogo mesta lomovatovskogo kul'tury v ust'e reki Sylva,” *Vestnik Permskogo Universiteta* 5 (2004), 125–30.
- Menghin, Wilfried (ed.). *Merowingerzeit: Europa ohne Grenzen. Archäologie und Geschichte des 5. bis 8. Jahrhunderts* (Berlin/Wolfratshausen, 2007).
- Mentzos, Aristotelis, “Protes paratereseis gia ten exelixe ton politikon tesmon tes Thessalonikes sten auge tou Mesaiona,” *Byzantina* 26 (2006), 33–61.
- Mentzos, Aristotelis, *Ta psephidota tes anoikodomeses tou naou tou Agiou Demetriou ston 7o aiona m. Ch.*, Byzantine keimena kai meletai 54 (Thessaloniki, 2010).
- Merkevičius, Algimantas, “Sauginių plokštinių kapinynas,” *LA* 3 (1984), 41–63.
- Mesiarkin, Adam, “Hľadanie elity a dynastie. Príspevok k etnogenéze Slovanov,” in *Ingenius laus. Zborník štúdií venovaný jubiliujúcemu prof. PhDr. Jánovi Lukačkovi, CSc.*, eds. E. Benková and M. Púčík (Bratislava, 2017), 55–68.
- Mesnianskina, S.V., “Pogrebal'nyi obriad kul'tury dlennykh kurganov kak istochnik po izucheniiu iazychestva,” in *Istoriia i kul'tura drevnikh i srednevekovykh slavian*, ed. V.V. Sedov, Trudy VI Mezhdunarodnogo Kongress Slavianskoi Arkheologii 5 (Moscow, 1999), 177–85.
- Messal, Sebastian, and Bartłomiej Rogalski, “The ‘Slavonisation’ of the southwestern Baltic area: preliminary report on the investigations in the Pyritz region,” in *The Very Beginning of Europe? Cultural and Social Dimensions of Early Medieval Migration and Colonisation (5th–8th Century)*. *Archaeology in Contemporary Europe. Conference, Brussels, May 17–19, 2011*, eds. Rica Annaert, Tinne Jacobs, Ingrid In't Ven and Steffi Coppens, *Relicta Monografieën*, 7 (Brussels, 2012), 89–100.
- Mesterházy, Károly, “Beiträge zu den gepidisch-thüringischen Beziehungen im 5–6. Jahrhundert,” *FA* 35 (1984), 77–85.
- Mesterházy, Károly, “A gepidák kereskedelme és népi kapcsolatai,” in *A gepidák. Kora középkori germán királyság az Alföldön*, ed. P. Gy. Havassy, Gyulai katalógusok 7 (Gyula, 1999), 79–89.



- Metcalf, David Michael, *The Copper Coinage of Thessalonica under Justinian I*, Veröffentlichungen der Numismatischen Kommission 5 (Vienna, 1976).
- Metcalf, David Michael, "Mint-activity in Byzantine Thessaloniki," in *To nomismasto makedoniko choro. Praktika B' epistemonikes synanteses. Nomismatokopeia, kyklophoria, eikonographia, istoria. Archaioi, byzantinoi kai neoterai chronoi*, ed. P. Adam-Veleni (Thessaloniki, 2000), 171–82.
- Michelbertas, Mykolas, "Issledovaniia kurganov v severnoi Litve," in *Arkheologicheskie otkrytiia 1970 goda*, ed. B.A. Rybakov (Moscow, 1971), 320–21.
- Miclaus, Lapo, "L'archeologia funeraria: un contributo per la ricostruzione delle dinamiche insediative nell'Istria altomedievale," *Atti e memorie della Società istriana di archeologia e storia della patria* 50 (2002), 237–76.
- Miclea, Ioan and Radu Florescu, *Daco-romanii*, vol. 2 (Bucharest, 1980).
- Mikhailov, Stoian, "Etapi v parichnata cirkulaciia prez rannovizantiiskata epokha (498–681) v provinciia Vtora Miziiia," *Numizmatika, sfragistika i epigrafika* 6 (2010), 109–22.
- Mikhailov, Stoian, "Kolektivnite monetni nakhodki ot VI–VII vek kato izvor za zaplashtaneto na truda prez rannovizantiiskata epokha," in *Velikotärnovskiiat universitet "Sv. sv. Kiril i Metodii" i bälgarskata arkheologiia*, ed. B. Borisov, vol. 1 (Veliko Tärnovo, 2010), 683–92.
- Mikhailov, Stoian, "Life-span of the settlements in the provinces of Moesia Secunda and Scythia as evidenced by coin finds (late 5th–early 7th c. AD)," in *The Lower Danube Roman Limes (1st–6th c. AD)*, eds. L. Vagalinski, N. Sharankov and S. Torbatov (Sofia, 2012), 461–76.
- Mikhailova, Elena R., "Severnnye dlinnye kurgany: khronologicheskaiia periodizaciia i sud'by naseleniia (zapadnaia chast' areala)," in *Staroladozhskii sbornik. Materialy I–V konferencii "Severo-Zapadnaia Rus' v epokhu sredenevekov'ia: mezhdudisciplinarnye issledovaniia". Staraia Ladoga, 1994–1998*, ed. A.A. Selin (St. Petersburg/Staraia Ladoga, 1998), 60–69.
- Mikhailova, Elena R., "Tisnemye bliashki-oboimicy iz pamiatnikov kul'tury pskovskikh dlinnykh kurganov," in *Sbornik nauchnykh trudov v chest' 60-letii A.V. Vinogradova*, ed. S.V. Khavrin (St. Petersburg, 2007), 158–64.
- Mikhailova, Elena R., "Metallicheskie plastinchatye ukrasheniia iz pskovskikh dlinnykh kurganov: sostav garnitur i razvitie ornamentacii," *Stratum+*, no. 5 (2012), 261–76.
- Mikhailova, Elena R., "Braslety s utolshchennymi koncami v germanskikh i vostochno-evropeiskikh drevnostiakh," in *Skandinavskie chteniia 2012 goda. Etnograficheskie i kul'turno-istoricheskie aspekty*, ed. T.A. Shrader (St. Petersburg, 2014a), 16–22.
- Mikhailova, Elena R., "Kul'tura dlinnykh kurganov v iugo-vostochnoi Estonii: obshchie cherty i regional'nye osobennosti," in *Ajast ja ruumist. Uurimusi Mare Auna auks*, eds. Ü. Tamla and V. Lang (Tallinn/Tartu, 2014b), 211–30.

- Mikhailova, Elena R., "Rannesrednevekovnye poseleniia i kurgany v komplekse pamiatnikov Rapti-Navolok v Cheremeneckom ozere," *Stratum+*, no. 5 (2014c), 273–86.
- Mikhailova, Elena R., "Kul'tura pskovskikh dlinnykh kurganov: sovremennoe sostoianie issledovanii i rol' V.V. Sedova v ee izuchenii," *KSIA* 240 (2015a), 20–34.
- Mikhailova, Elena R., "Liteye plastinchatye braslety s prodol'nym rebrom: rasprostranenie i khronologiiia na severo-zapade Vostochnoi Evrope," *AIPPP* 61 (2015b), 259–69.
- Mikhailova, Elena R., "Ukrasheniia iz legkoplavkikh splavov v kul'ture pskovskikh dlinnykh kurganov: osnovnye formy i poisk analogii," in *A Ladoga i ladozhskaia zemlia v epokhu srednevekov'ia 5. Materialy mezhdunarodnoi konferencii "Gorod Ladoga i Severnaia Rus' v pervye veka russkoi istorii". Staraiia Ladoga, 13 iunia 2015 g.*, eds. N. Kirpichnikov, S.V. Beleckii and V.A. Lapshin (St. Petersburg, 2015c), 125–34.
- Mikhailova, Elena R., "The population of the southeast shore of the Gulf of Finland and its contacts with the regions of the Baltic Sea in the first millenium AD," *ArchB* 23 (2016), 181–98.
- Mikhailova, Elena R., "O rasprostranении izdelii iz olovianistykh splavov v lesnoi zone Vostochnoi Evropy v seredine-vtoroi polovine I tys. n. e.," *Stratum+* no. 5 (2017), 87–98.
- Mikhailova, Elena R., "Kul'tura pskovskikh dlinnykh kurganov—kul'tovyi soiuz? K postanovke problemy," *Stratum+*, no. 5 (2018), 105–16.
- Mikhailova, Elena R. and I.A. Fedorov, "Sluchainye nakhodki u pos. Kommunar, Leningradskoi oblasti—predpolagaemyi mogil'nik I tys. n. e.," *AIPPP* (2011), 69–76.
- Mikheev, Vladimir K. and Oleg M. Prykhodniuk, "Pen'kivske poselennia na Sivers'komu Dintsi," *Arkheolohiia* 54 (1986), 75–82.
- Mikić, Živko, "Erste Ergebnisse anthropologischer Untersuchung des Germanenfriedhofes von Viminacium (Serbien)," *Starinar* 43–44 (1992–1993), 191–99.
- Mikić, Živko, *Nekropole iz epokhe seobe naroda u Singidnumu* (Belgrade, 2007).
- Milavec, Tina, "Late antique glass in Slovenia," in *Annales du 19<sup>e</sup> Congrès de l'Association Internationale pour l'Histoire du Verre, Piran 2012*, ed. I. Lazar (Koper, 2015), 277–85.
- Milavec, Tina and Žiga Šmit, "Analyses of glass from late antique hilltop site Korinjski hrib above Veliki Korinj (Slovenia)," *Arheološki pregled* 71 (2020), 271–82.
- Milchev, Atanas, Kina Koicheva and Pavlin Dimitrov, "Proizvodstven centar za stroitelna keramika v Dolna Miziiia," in *Sbornik v pamet na Petar Gorbanov*, ed. S. Angelova (Sofia, 2003), 430–50.
- Miletić, Nada, "Nekropola u selu Mihaljevićima kod Rajlovca," *GZMBH* 11 (1956), 9–39.
- Miletić, Nada, "Das frühmittelalterliche Gräberfeld in Rakovčani bei Prijedor," *Wissenschaftliche Mitteilungen des bosnisch-herzegowinischen Landesmuseums* 5 (1975), pp. 177–243.
- Miletić, Nada, "Ranosrednjovekovna nekropola u Koritima kod Duvna," *GZMBH* 33 (1978), 141–204.

- Milinković, Mihailo, "Ulpijana kod Grachanice na Kosovu i gradina na Jelici kod Chachka u svetlu akulturacionih procesa u Iliriku VI v." in *Trećja jugoslovenska konferencija vizantologa. Kruševac, 10–13 maj 2000*, eds. L. Maksimović, N. Radošević and E. Radulović (Belgrade/Kruševac, 2002), 343–60.
- Milinković, Mihailo, "O tzv. zhenskom germanskom grobu iz Ulpijane," in *Spomenica Jovana Kovachevicha*, eds. R. Bunardžić and Ž. Mikić (Belgrade, 2003), 43–78.
- Milinković, Mihailo, "Einige Bemerkungen zu spätromanischen Funden in Süddalmatien und Montenegro," in *Reliquiae gentium. Festschrift für Horst Wolfgang Böhme zum 65. Geburtstag*, ed. C. Dobiati, Veröffentlichung des Vorgeschichtlichen Seminars Marburg 14 (Rahden, 2005), 303–17.
- Milinković, Mihailo, "Stadt oder 'Stadt': frühbyzantinische Siedlungsstrukturen im nördlichen Illyricum," in *Post-Roman Towns, Trade, and Settlement in Europe and Byzantium*, ed. J. Henning, vol. 2, Millennium-Studien 5.2 (Berlin/New York, 2007), 159–92.
- Milinković, Mihailo, *Gradina na Jelici. Ranovizantijski grad i srednjovekovno naselje* (Belgrade, 2010).
- Milinković, Mihailo, "Mreža naselja i njihova struktura na severu Ilirika u 6. v.—arkheološki podaci," in *Vizantijski svet na Balkanu*, B. Krsmanović, L. Maksimović and R. Radić, vol. 2, Posebna izdanja 42 (Belgrade, 2012), 299–311.
- Milinković, Mihailo, "Die Neuformung des Landschaftsbildes und der Stadt im Nordillyricum des 6. Jahrhunderts, Fallstudie Jelica-Gradina," *HAM* 20/1 (2014), 251–59.
- Milinković, Mihailo, "Gradina na Jelici, regionalni centar na severu Istochnog rimskog carstva," in *Gradina na Jelici. Trideset godina arkeoloških istraživanja (1984–2014)*, eds. M. Milinković and P. Špehar, Izložbeni katalozi 18 (Čačak, 2014), 17–51.
- Milinković, Mihailo, "'Frühbyzantinische Befestigungen' als Siedlungsgrundeinheit im Illyricum des 6. Jahrhunderts," in *Focus on Fortifications. New Research on Fortifications in the Ancient Mediterranean and the Near East*, eds. R. Frederiksen, S. Müth, P.I. Schneider and M. Schnelle, Monographs of the Danish Institute at Athens 18 (Oxford/Philadelphia, 2016), 506–16.
- Milinković, Mihailo, "Gradina na planini Jelici. Regionalni centar na severu Istochnog rimskog carstva," in *Gradina na Jelici. Utvrdjeni centar u Iliriku VI veka i visheslojno arkeološko nalazište*, ed. M. Milinković, Galerija Srpske Akademije Nauka i Umetnosti 140 (Belgrade/Čačak, 2017), 23–60.
- Militký, Jiří, "Finds of Roman and early Byzantine gold coins on the territory of the Czech Republic," *SN17* (2003), 53–76.
- Militký, Jiří, "Finds of the early Byzantine coins of the 6th and the 7th century in the territory of the Czech Republic," in *Byzantine Coins in Central Europe Between the 5th and 10th Century. Proceedings from the Conference Organized by the Polish*

- Academy of Arts and Sciences and the Institute of Archaeology of the University of Rzeszów under the Patronage of Union Académique International (Programme No. 57 Moravia Magna), Kraków, 23–26 IV 2007*, ed. M. Wołoszyn, Moravia Magna, Seria Polona 3 (Cracow, 2009), 357–93.
- Militký, Jiří, *Finds of Greek, Roman, and Early Byzantine Coins in the Territory of the Czech Republic. I. Bohemia*, Collection Moneta 107 (Wetteren, 2010).
- Milo, Peter, *Frühmittelalterliche Siedlungen in Mitteleuropa. Eine vergleichende Strukturanalyse durch Archäologie und Geophysik*, Studien zur Archäologie Europas 21 (Bonn, 2014).
- Minasian, R.S., “Raboty v okrestnosti pos. Usviaty,” in *Arkheologicheskie otkrytiia 1971 goda*, ed. B.A. Rybakov (Moscow, 1972), 18–19.
- Minasian, R.S., “Poselenie i mogil’nik na beregu ozera Uzmen,” *Trudy Gosudarstvennogo Ordena Lenina Ermitazha* 20 (1979), 180–84.
- Minasian, R.S., “Problema slavianskogo zaseleniia lesnoi zony Vostochnoi Evropy v svete arkheologicheskikh dannyykh,” in *Severnaia Rus’ i ee sosedi v epokhu rannego srednevekov’ia. Mezhyuzovskii sbornik*, ed. A.D. Stoliar (Leningrad, 1982), 24–29.
- Minasian, R.S. “Dannye o sposobakh izgotovlennykh krymskikh pal’chatykh fibul,” *MAIET* 6 (1997), 479–89.
- Minasian, R.S. “Osobennosti ranneslavianskogo liteinogo i iuelirnogo proizvodstva,” in *Drevnosti Podvin’ia: istoricheskii aspekt. Po materialam kruglogo stola, posviashchennogo pamiat’ A.M. Mikliaeva (6–8 oktiabria 1999)*, eds. G.V. Vilinbakhov, B.S. Korotkevich, A.N. Mazurkevich, and Iu. Iu. Piotrovskii (St. Petersburg, 2003), 206–11.
- Minchev, Aleksandăr, “Early Byzantine weights found in northeastern Bulgaria and some notes on their production, distribution, and notes,” in *Numizmatichni, sfragistichni i epigrafski prinoi kăm istoriata na Chernomorskoto kraibrezhie. Mezhdunarodna konferenciia v pamet na st. n. s. Milko Mirchev, Varna 15–17 septemvri 2005 g.*, ed. I. Lazarenko. *Acta Musei Varnensis* 7.2 (Varna, 2008), 7–40.
- Mingalev, V.V., “Monetnyi kompleks pamiatnikov rannego srednevekov’ia Prikam’ia i Vychegodskogo kraia,” in *Putiami srednevekovykh trgovcev. Sbornik materialov “kruglovo stola” v ramkakh Mezhdunarodnogo (XVI Ural’skogo) arkheologicheskogo soveshchaniia, Perm’, 6–10 oktiabria 2003 g.*, ed. A.M. Belavin (Perm’, 2004), 39–46.
- Mingalev, V.V., “Raskopki mogil’nika Pyshtain II v Gainskom raione Komi-Permiackogo AO,” in *Arkheologicheskie otkrytiia 2005 goda*, ed. N.V. Lopatin (Moscow, 2007), 384–85.
- Mingazov, Khamil R., “Bolgary Alzeko v Bavarii, Karantanii i Italii kak primer avtonomnoi chasti etnokul’turnoi obshchnosti,” *Vostochnaia Evropa v drevnosti i srednevekov’e* 29 (2017), 164–66.

- Mišeska-Tomić, Olga, *Balkan Sprachbund: Morpho-Syntactic Features* (Dordrecht, 2006).
- Mišta, Ewelina A. and Aneta Gójska, "Analiza składu pierwiastkowego zabytków stopowych miedzi i kruszców ze st. 2 w Kosewie (Kossewen III)," in *Kosewo. Archiwalne cmentarzysko z okresu wędrówek ludów Kossewen III. Badania w roku 2014*, ed. A. Jaremek (Warsaw, 2015), 71–84.
- Mitrea, Ioan, "Principalele rezultate ale cercetărilor arheologice din așezarea de la Davideni (sec. V–VII e. n.)," *MA* 6–8 (1974–1976), pp. 65–92.
- Mitrea, Ioan, "Influențe bizantine în cultura materială și spirituală din regiunea subcarpatică a Moldovei în sec. VI–IX," *SCIVA* 30, no. 2 (1979), 145–62.
- Mitrea, Ioan, "Noi descoperiri arheologice în așezarea din secolele V–VII de la Davideni-Neamț," *MA* 18 (1992), 203–32.
- Mitrea, Ioan, "Așezarea din secolele V–VII de la Davideni, jud. Neamț. Cercetările arheologice din anii 1988–1991," *MA* 19 (1994), 279–332.
- Mitrea, Ioan, *Așezarea din secolele VI–IX de la Izvoare-Bahna. Realități arheologice și concluzii istorice*, Bibliotheca Memoriae Antiquitatis 4 (Piatra Neamț, 1998).
- Mitrea, Ioan, "L'habitat médiéval ancien de Davideni-Neamț. Précisions chronologiques et considérations ethno-culturelles," *Studia antiqua et archaeologica* 7 (2000), 439–54.
- Mitrea, Ioan, *Comunități sătești la est de Carpați în epoca migrațiilor. Așezarea de la Davideni din secolele V–VIII*, Bibliotheca Memoriae Antiquitatis 9 (Piatra Neamț, 2001).
- Mitrea, Ioan, *Așezarea medievală timpurie de la Ștefan cel Mare-Gutinaș, județul Bacău* (Onești, 2015).
- Mitrea, Ioan, Gheorghe Dumitroaia, and Elena Ciubotaru, "Cercetările arheologice de la Borșeni-Neamț," *MA* 21 (1997), 131–93.
- Mitrea, Ioan, Constantin Eminovici, and V. Momanu. "Așezarea din secolele V–VII de la Ștefan cel Mare, jud. Bacău," *Carpica* 18–19 (1986–1987), 215–50.
- Mitrofanov, A.G., "Novye dannye o pamiatnikakh VI–VIII vv. srednei i severnoi Belorussii," in *Drevnosti Belorussii. Materialy konferencii po arkheologii Belorussii i smezhnykh territorii (1966 g.)*, eds. V.F. Isaenko, A.G. Mitrofanov and G.V. Shtykhov (Minsk, 1966), 218–35.
- Mitrofanov, A.G., "Bancerovskoe gorodishche," in *Belorusskie drevnosti. Doklady k konferencii po arkheologii Belorussii (ianvar'-fevral' 1968)*, eds. V.D. Bud'ko, Ia. G. Zverugo, V.F. Isaenko and K.P. Shuta (Minsk, 1967), 243–61.
- Mitrofanov, A.G., "Issledovaniia v Lepel'skom Rogachevskom raionakh," in *Arkheologicheskie otkrytiia 1976 goda*, ed. B.A. Rybakov (Moscow, 1977), 412.
- Mitrofanov, A.G., *Zheleznyi vek srednei Belorussii (VII–VI vv. do n.e.–VIII v. n.e.)* (Minsk, 1978).

- Mitthof, Fritz, Oliver Jens Schmitt, and Peter Schreiner, *Herrschaft und Politik in Südosteuropa von der römischen Antike bis 1300*, Handbuch zur Geschichte Südosteuropas 1 (Munich/Vienna, 2019).
- Mizoguchi, Koji, "The evolution of prestige good systems: an application of network analysis to the transformation of communication systems and their media," in *Network Analysis in Archaeology. New Approaches to Regional Interaction*, ed. C. Knapett (Oxford, 2013), 151–78.
- Mocanu, Marian, "Notes on the 'African Red Slip Ware' ceramics in Scythia Minor," *Studia antiqua et archaeologica* 18 (2012), 319–40.
- Modrijan, Zvezdana, "Keramika," in *Poznoantična utrjena naselbina Tonovcov grad pri Kobaridu. Najdbe*, eds. Z. Modrijan and T. Milavec, Opera Instituti Archaeologici Sloveniae 24 (Ljubljana, 2011), 121–219 and 514–56.
- Mogarichev, Iurii M. and Andrei V. Sazanov, "K voprosu o khazarakh na Bospore v konce VII-nachale VIII v.," in *Bosporskii fenomen: problema sootnosheniia pis'mennykh i arkheologicheskikh istochnikov. Materialy mezhdunarodnoi nauchnoi konferencii*, ed. V. Iu. Zuev (St. Petersburg, 2005), 354–60.
- Mogarichev, Iurii M., Andrei V. Sazanov, and Sergei B. Sorochan. *Krym v "khazarskoe" vremia (VIII–seredina X vv.): voprosy istorii i arkheologii* (Moscow, 2017).
- Mokrousov, S.V., "O khronologii sel'skikh poselenii Krymskogo Priazov'ia v rann-evizantiiskii period," in *Antikovedenie na rubezhe tysiacheletii. Mezhdisciplinarnye issledovaniia i novye metodiki (informatika, podvodnaia arkheologiia i sozdanie kompiuternoii bazy dannykh. Tezisy dokladov konferencii, 29–30 iunია 2000 g.*, ed. G.A. Koshelenko (Moscow, 2000), 73–74.
- Mongait, A.L., "Arkheologicheskie zametki. I. Mogila vsadnika u s. Arcybasheva," *KSDPI* 41 (1951), 124–30.
- Monin, Andrei S. and Iurii A. Shishkov, *Istoriia klimata* (Leningrad, 1979).
- Moora, Harri, "Ob oloviannykh ukrasheniakh i ikh izgotovlenii v Pribaltike," in *Munera archaeologica Iosepho Kostrzewski quinquagesimum annum optimarum artium studiis deditum peragenti ab amicis collegis discipulis oblata*, ed. J. Skoracki (Poznań, 1963), 355–67.
- Moora, T. "Tarbja kivikalmed Paide lähedal ja Põhja-Eesti tarandkalmete keraamika," *ENSV* 3 (1967), 280–300.
- Moravcsik, Gyula, "Byzantinische Mission im Kreise der Türkvölker an der Nordküste des Schwarzen Meeres," in *Proceedings of the XIIIth International Congress of Byzantine Studies. Oxford, 5–10 September 1966*, eds. J.M. Hussey, D. Obolensky, and S. Runciman (Oxford, 1967), 15–28.
- Moreland, John, "Concepts of the early medieval economy," in *The Long Eighth Century*, eds. I.L. Hansen and C. Wickham, *The Transformation of the Roman World* 11 (Leiden/Boston, 2000), 1–34.

- Moreland, John, *Archaeology and Text* (London, 2003).
- Moreland, John, *Archaeology, Theory and the Middle Ages. Understanding the Early Medieval Past* (London, 2010).
- Morgan, Lewis Henry, *Ancient Society, or Researches in the Lines of Human Progress from Savagery through Barbarism to Civilization* (New York, 1877).
- Morintz, Sebastian, "Săpăturile de pe dealul Ciurel," *MCA* 7 (1961), 658–63.
- Morintz, Sebastian and Dinu V. Rosetti, "Din cele mai vechi timpuri și pînă la formarea Bucureștilor," in *Bucureștii de odinioară în lumina săpăturilor arheologice*, ed. I. Ionașcu (Bucharest, 1959), 11–47.
- Morozov, Iu. A. "Nakhodka elementov poiasnogo 'geral'dicheskogo' nabora na Selivanikhinskome gorodishche," in *IX Mezhdunarodnaia arheologicheskaiia konferenciia studentov i aspirantov "Problemy arheologii Vostochnoi Evropy" (materialy konferencii)*, ed. E.V. Vdovchenkov (Rostov-na-Donu, 2014), 80–84.
- Morozov, V. Iu., "K voprosu o putiakh proniknoveniia sasanidskikh monet i metalla v uralo-povolzhskikh region," in *Kul'tury stepei Evrazii vtoroi poloviny I tysiacheletiiia n.e. Tezisy dokladov Mezhdunarodnoi nauchnoi arheologicheskoi konferentsii 14–17 noiabria 1995 g.*, eds. D.A. Stashenkov, A.F. Kochkina and V.N. Sorokin (Samara, 1995), 53–56.
- Morozov, V. Iu., "Topografiia kladov i sluchainykh nakhodok monet na territorii Kuibyshevshoi (Samarskoi) oblasti," *KraeS* 7 (1995), 319–26.
- Morozov, V. Iu., "Puti proniknoveniia sasanidskikh monet i khudozhestvennykh izdelii v Povolzh'e i Prikam'e," in *Kul'tury evraziiskikh stepei vtoroi poloviny I tysiacheletiiia n.e.*, eds. A.F. Kochkina, L.V. Kuznecova, and D.A. Stashenkov (Samara, 1996), 148–64.
- Morozov, V. Iu., "Izpol'zovanie nakhodok sasanidskikh monet dlia khronologii arheologicheskikh pamiatnikov Povolzh'ia i Prikam'ia," in *Kul'tury evraziiskikh stepei vtoroi poloviny I tysiacheletiiia n.e. (voprosy khronologii). Materialy II Mezhdunarodnoi arheologicheskoi konferencii, 17–20 noiabria 1997 g.*, eds. D.A. Stashenkov, A.F. Kochkina, and L.V. Kuznecova (Samara, 1998), 378–86.
- Morozov, V. Iu., "Topografiia nakhodok sasanidskikh drakhm v Uralo-Povolzhskom regione," *KraeS* 12 (2005), 81–98.
- Morrisson, Cécile, Vladislav Popović, and Vujadin Ivanišević, *Les trésors monétaires byzantins des Balkans et d'Asie Mineure (491–713)*, *Réalités byzantines* 13 (Paris, 2006).
- Moutzali, Aphentra G., "He pole ton Patron kata ton 6o kai 7o aiona," in *Protobyzantine Messene kai Olympia. Aktikos kai agrotikos choros ste Dylike Peloponneso. Praktika tou Diethnous symposiou, Athena, 29–30 maiou 1998*, eds. P.G. Themelis and V. Konti (Athens, 2002), 174–88.
- Mugurēvičs, Ēvalds, "Issledovanie poselenii, gorodishch i zamkov na territorii Latviiskoi SSR," *Acta Baltico-Slavica* 5 (1967), 159–201.

- Müller, Róbert, "Die Awaren und die Landwirtschaft," in *Reitervölker aus dem Osten. Hunnen + Awaren. Burgenländische Landesausstellung 1996. Schloß Halbturn, 26. April–31. Oktober 1996*, eds. F. Daim, K. Kaus, and P. Tomka (Eisenstadt, 1996), 365–71.
- Müller, Robert, "Eingermanisches Grab der Frühawarenzeit aus Keszthely-Fenekpuszta," *AAASH* 51 (1999–2000), 341–57.
- Müller, Robert, "Das Familiengräberfeld Keszthely, Fenéki-Straße," in *Germanen am Plattensee. Ausstellung des Balatoní Muzeums Keszthely im Museum für Frühgeschichte des Landes Niederösterreich, Schloss Traismauer, vom 6. April bis 1. November 2002*, ed. R. Müller (Traismauer, 2002a), 33–35.
- Müller, Robert, "Eine streifenplattierte Gürtelgarnitur aus dem awarischen Gräberfeld von Gyenesdiás," in *Germanen am Plattensee. Ausstellung des Balatoní Muzeums Keszthely im Museum für Frühgeschichte des Landes Niederösterreich, Schloss Traismauer, vom 6. April bis 1. November 2002*, ed. R. Müller (Traismauer, 2002b), 43–45.
- Müller, Robert, "A mikebudai avar kengyelpár," *Arrabona* 44, no. 2 (2006), 349–56.
- Müller, Robert, "Neue germanische Funde aus der Festung Keszthely-Fenekpuszta," *AAASH* 59, no. 2 (2008), 231–45.
- Müller, Robert, *Die Gräberfelder vor der Südmauer der Befestigung von Keszthely-Fenekpuszta*, Castellum Pannonicum Pelsonene 1 (Budapest/Leipzig, 2010).
- Murygin, A.M., "Poselenie Usogorsk III na srednei Mezeni," *Materialy po arkheologii evropeiskogo Severo-Vostoka* 8 (1980), 71–91.
- Murygin, A.M. and S.M. Pliusnin, "Poselenie ladmas I v basseine srednei Mezeni," in *Vzaimodeistvie kul'tur severnogo Priural'ia v drevnosti i srednevekov'e. Materialy po arkheologii Evropeiskogo Severo-Vostoka*, eds. A.D. Napalkov, E.A. Savel'eva, P.Iu. Pavlov, and K.S. Korolev, *Materialy po arkheologii Evropeiskogo Severo-Vostoka* 12 (Syktyvkar, 1993), 99–115.
- Muscă, Luciana and T.I. Muscă, "Săpăturile arheologice de la Băleni-Români, jud. Dîmbovița," *MCA* 14 (1980), 423–29.
- Musianowicz, Krystyna, "Cmentarzysko kurhanowe z VI–VIII w. w Klimentowiczach koło Szepietowki (USSR)," *WA* 39, no. 3 (1975), 325–38.
- Musteață, Sergiu, "Unele concretizări privind vasul de metal din tezaurul monetar de la Horgești, jud. Bacău, România," in *Arheologia între știință, politică și economia de piață*, ed. S. Musteață (Chișinău, 2010), 99–127.
- Nagy, Balázs, Felicitas Schmieder, and András Vadas, „Introduction,” in *The Medieval Networks in East Central Europe: Commerce, Contacts, Communication*, eds. B. Nagy, F. Schmieder, A. Vadas (Abingdon/New York, 2019), 1–7.
- Nagy, Margit, *Awarenzeitliche Gräberfelder im Stadtgebiet von Budapest*, Monumenta Avarorum Archaeologica 2 (Budapest, 1998).



- Nagy, Margit, "A gepida királyság (454–567)," in *A gepidák. Kora középkori germán királyság az Alföldön*, ed. P.Gy. Havassy, Gyulai katalógusok 7 (Gyula, 1999), 29–37.
- Nagy, Margit, "Langobard sírok Budapest-Óbuda/Aquincumból," in *Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére*, ed. T. Vida (Budapest, 2012), 141–74.
- Nagy, Margit, Günter Neumann, Walter Pohl and Agnes B. Tóth, "A gepidák," *MFMESEA* 6 (2000), pp. 165–90.
- Nagy, Sándor, "Nekropola kod Aradca iz ranog srednjeg veka," *RVM* 8 (1959), 45–102.
- Nallbani, Etleva, "Quelques objets anciens dans la culture de 'Komani,'" *Studia Albanica* 1 (2003), 107–19.
- Nallbani, Etleva, "Résurgence des traditions de l'Antiquité tardive dans les Balkans occidentaux: étude des sépultures du nord de l'Albanie," *HAM* 10 (2004a), 25–42.
- Nallbani, Etleva, "Transformations et continuité dans l'ouest des Balkans: le cas de la civilisation de Komani (VI<sup>e</sup>–IX<sup>e</sup> siècles)," in *L'Illyrie méridionale et l'Épire dans l'Antiquité. IV. Actes du IV<sup>e</sup> colloque international de Grenoble, 10–12 octobre 2002*, eds. P. Cabanes and J.-L. Lamboley (Paris, 2004b), 481–90.
- Nallbani, Etleva, "Quelques objets parmi les plus anciens de la culture de Komani," in *De l'Âge du fer au haut Moyen Âge. Archéologique funéraire, princes et élites guerrières. Actes des tables rondes Longroy I (1er et 2 septembre 1998) et Longroy II (24 et 25 août 1999)*, ed. X. Delestre, Mémoires publiés par l'Association française d'archéologie funéraire 15 (Saint-Germain-en-Laye, 2006), 173–79.
- Nallbani, Etleva, "Urban and rural mortuary practices in early medieval Illyricum. Some general considerations," in *The Material and the Ideal. Essays in Medieval Art and Archaeology in Honour of Jean-Michel Spieser*, eds. A. Cutler and A. Papaconstantiniou, *The Medieval Mediterranean* 70 (Leiden/Boston, 2007), 47–61 and 241–54.
- Nallbani, Etleva, "Early medieval north Albania: new discoveries, remodelling connections," in *Adriatico altomedievale (VI–XI secolo). Scambi, porti, produzioni*, eds. S. Gelichi and C. Negrelli (Venice, 2017), 311–46.
- Neagu, Nina, "Agricoltura la sud de Carpați în secolele IV–XI în lumina cercetărilor de la Șirna, jud. Prahova," *Terra Nostra* 4 (1981), 129–32.
- Nechaeva, L.G., "O zhilishche kochevnikov iuga Vostochnoi Evropy v zheleznom veke (I tys. do n.e.–pervaia polovina II tys. n. e.)," in *Drevnee zhilishche narodov vostochnoi Evropy*, ed. M.G. Rabinovich (Moscow, 1975), 7–49.
- Nedopako, D.P., "Tekhnologiiia obrobky zaliza na Pastyrs'komu gorodyskhchi," *Arkheolohiia*, no. 3 (1998), 25–30.
- Negin, A.E., "K voprosu ob interpretacii shlemov iz mogil'nika riazano-okskikh finnov u s. Caricino," *Drevnie civilizacii: socium i chelovek* (2018), 47–65.
- Negru, Mircea, "Descoperiri arheologice din secolele III și V la București-Militari 'Câmpul Boja,'" *BMM* 16 (2002), 58–72.

- Negru, Mircea, Alexandru Bădescu, and Vasilica Cuculea-Sandu. *Militari-Câmpul Boja, an Archaeological Site on the Territory of Bucharest (Archaeological Investigations Since 1958 up to 2005)*. VI. *Settlements Dating from the 5th–7th Centuries* (Bucharest, 2009).
- Neil, Bronwen, *Seventh-Century Popes and Martyrs. The Political Hagiography of Anastasius Bibliothecarius*, *Studia Antiqua Australiensia* 2 (Turnhout, 2006).
- Neil, Bronwen, “From *tristia* to *gaudia*. The exile and martyrdom of Pope Martin I,” in *Martyrdom and Persecution in Late Antique Christianity. Festschrift Boudewijn Dehandschutter*, ed. J. Leemans, *Bibliotheca Ephemeridum theologicarum Lovaniensium* 241 (Leuven/Paris/Walpole, 2010), 179–94.
- Németh, Ferenc, “Avar fejedelem a homokbányában,” *Élet és Tudomány* 26 (1971), 611–14.
- Neri, Elisabetta, Bernard Gratuze, and Nadine Schibille, “The trade of glass beads in early medieval Illyricum: towards an Islamic monopoly,” *Archaeological and Anthropological Sciences* 10, no. 2 (2018), 1–16.
- Nestor, Ion, “Continuitatea în istoria formării poporului român. Reflecții pe marginea noilor date arheologice,” *Magazin istoric* 3, no. 6 (1969), 24–27.
- Nestor, Ion and C.S. Nicolaescu-Ploșor, “Der völkerwanderungszeitliche Schatz Negrescu,” *Germania* 22, no. 1 (1938), 33–41.
- Nestor, Ion and Eugenia Zaharia. “Săpăturile de la Sărata Monteoru (r. Buzău, reg. Ploiești).” *MCA* 5 (1959), pp. 51–18.
- Netting, Robert McC., *Smallholders, Householders. Farm Families and the Ecology of Intensive, Sustainable Agriculture* (Stanford, 1993).
- Neustupný, Evžen, “Czech archaeology under Communism,” in *Archaeology of the Communist Era. A Political History of Archaeology of the 20th Century*, ed. L.R. Lozny (Cham, 2016), 151–66.
- Nigdelis, Pandelis M., “Pou briskontan oi alykes tou naou tou Agiou Demetriou? To edikto tou Ioustinianou II IG X 21, 24 kai evan neo egrapho apo to archeio to Stephanou Dragoumi,” *Egnatia* 11 (2007), 19–30.
- Niinemets, E., L. Saarse and A. Poska, “Vegetation history and human impact in the Parika area, central Estonia,” *Proceedings of the Estonian Academy of Sciences. Geology* 51, no. 4 (2002), 241–58.
- Nikitina, Anna V., “Nekotorye sluchainye nakhodki epokhi velikogo pereseleniia narodov i rannego srednevekov’ia Ulianovskogo regiona,” *Voiazdsher. Mir i chelovek*, no. 8 (2017), 59–86.
- Nikitina, Tat’iana B., *Istoriia naseleniia Mariiskogo kraia v I tys. n.e. (po materialam mogil’nikov)*, *Trudy Mariiskoi Arkheologicheskoi Ekspedicii* 5 (Ioshkar-Ola, 1999).
- Nikolaenko, G.M., “Issledovaniia na Gerakleiskom poluoostrove,” in *Arkheologicheskie otkrytiia 1982 goda*, ed. B.A. Rybakov (Moscow, 1984), 306–07.
- Nikolajević, Ivanka. “Veliki posed u Dalmaciji u V i VI veku u svetlosti arheoloških nalaza,” *ZRV* 13 (1971), 277–91.

- Nikolov, Aleksandăr, "Alzeco, dux Vulgarum i zaselvaniata na prabălgari v Italiia," in *Bălgarsko srednovekovie: obshtestvo, vlast, istoriia. Sbornik v chest na prof. d-r Miliiana Kaimakamova*, eds. G. Nikolov and A. Nikolov (Sofia, 2013), 157–69.
- Nikolov, Dimităr, "Gradăt i seloto prez Kăsnata antichnost (IV–VI v.)," in *Kriptomkhristiianstvo i religiozen sinkretizăm na Balkanite*, ed. N. Damianov (Sofia, 2002), 25–30.
- (no author), "Şantierul Sărata-Monteoru," *SCIV* 4 nos. 1–2 (1953), 83–86.
- Noll, Rudolf, "Zum Silberschatz von Kuczurmare," in *In memoriam Constantini Daicovicu* (Cluj, 1974), 267–73.
- Noonan, Thomas S., "Russia, the Near East, and the steppe in the early medieval period: an examination of the Sasanian and Byzantine finds from the Kama-Urals area," *AEMA* 2 (1982), 269–302.
- Noonan, Thomas S., "What can archaeology tell us about the economy of Khazaria?" in *The Archaeology of the Steppes: Methods and Strategies. Papers from the International Symposium Held in Naples, 9–12 September 1992*, ed. B. Genito, Istituto Universitario orientale, Dipartimento di studi asiatici, series minor 44 (Naples, 1994), 331–45.
- Noonan, Thomas S., "European Russia, c. 500–c. 1050," in *The New Cambridge Medieval History*, ed. T. Reuter, vol. 3 (Cambridge, 1999), 487–513.
- Noonan, Thomas S., "The fur road and the silk road: the relations between Central Asia and northern Russia in the early Middle Ages," in *Kontakte zwischen Iran, Byzanz und der Steppe im 6.–7. Jahrhundert*, ed. Cs. Bálint, *Varia Archaeologica Hungarica* 10 (Budapest, 2000), 285–302.
- Nopcsa, Franz Baron, "Beiträge zur Vorgeschichte und Ethnologie Nordalbaniens," *WMBH* 12 (1912), 168–253.
- Norstedt, Gudrun, and Lars Östlund, "Fish or reindeer? The relation between subsistence patterns and settlement patterns among the forest Sámi," *Arctic Anthropology* 53 (2016), 22–36.
- North, Douglass C., *Structure and Change in Economic History* (New York, 1981).
- Nosov, Evgenii N., "K voprosu o slozhenii pogrebal'nogo obriada dlinnykh kurganov," *KSIA* 179 (1984), 11–17.
- Nosov, Evgenii N., "Nekotorye obshchie problemy slavianskogo raseleniia v lesnoi zone Vostochnoi Evropy v svete istorii khoziaistva," *Slaviano-russkie drevnosti* 1 (1988), 21–38.
- Nosov, Evgenii N. and Aleksei V. Plokhov, "Poselenie i mogil'nik na ozere Săezzhee," in *Rannesrednevekoye drevnosti lesnoi zony Vostochnoi Evropy (V–VII vv.)*, eds. A.M. Oblomskii and I.V. Islanova (Moscow, 2016), 349–94.
- Novak, Andrej. *L'Istria nella prima età bizantina*, *Collana degli atti del Centro di Ricerche Storiche*, 27 (Fiume, 2007).

- Novák, Jan, Lenka Lisá, Petr Pokorný, and Martin Kuna, "Charcoal analyses as an environmental tool for the study of early medieval sunken houses infills in Roztoky near Prague, Czech Republic," *JAS* 39, no. 4 (2012), 808–17.
- Nowak, Maciej, Radosław Liwoch, Magdalena Moskal-del Hoyo, Anna Rauba-Bukowska, and Jarosław Wilczyński, "Korzkiew 5—najstarze stanowisko średniowieczne na wyżynie Olkuskiej," *MArch* 41 (2016), 245–62.
- Nowakowski, Wojciech, "Osada z okresu wpływów rzymskich i V–VII wieku w Wyszemborku, stanowisku I, gm. Mragowo, woj. Olsztyńskie," *Światowit* 37 (1993), 77–113.
- Nowakowski, Wojciech, "Telegraf bez drutu—powracający problem pochodzenia Słowian," in *Cień Światowita czyli pięć głosów w sprawie etnogenezy Słowian*, ed. A. Kokowski (Lublin, 2002), 174–99.
- Nowakowski, Wojciech, "Die frühesten Steigbügel aus Preußen. Funde vom Gräberfeld Widitten II im Samland," in *The Turbulent Epoch. New Materials from the Late Roman Period and the Migration Period*, eds. B. Niezabitowska-Wiśniewska, M. Juściński, P. Łuczkiwicz and S. Sadowski. *Monumenta Studia Gothica*, 5 (Lublin, 2008), 189–212.
- Nyarádi, Zsolt, "Gepidák a Nagy-Küküllő felső folyásának dombközi medencéiben," in *Erdély és kapcsolatai a kora népvándorlás korában*, ed. Zs. Körösfői, Molnár István Múzeum Kiadványai 3 (Székelykeresztúr, 2010–2011), 321–76.
- O'Shea, John M., *Villagers of the Maros. A Portrait of an Early Bronze Age Society* (New York, 1996).
- Oanță-Marghitu, Rodica, "Argamum între Imperiul roman târziu și 'barbari'. Obiectele mărunte ca ipostaze ale comunicării," in *A la recherche d'une colonie. Actes du colloque international "40 ans de recherche archéologique à Orgamè / Argamum"*, Bucarest-Tulcea-Jurilovca, 3–5 octobre 2005, ed. M. Mănucu-Adameșteanu, *Orgame/Argamum, Supplementa* 1 (Bucharest, 2006), 345–74.
- Oberländer-Târnoveanu, Ernest, "Monnaies byzantines des VII<sup>e</sup>–X<sup>e</sup> siècles découvertes Silistra, dans la collection de l'académicien Péricle Papahagi, conservées au Cabinet des Médailles du Musée National d'Histoire de Roumanie," *Cercetări numismatice* 7 (1996), 97–127.
- Oberländer-Târnoveanu, Ernest, *Monedă și societate în teritoriile de la sud și est de Carpați (secolele VI–XIV)* (Cluj-Napoca, 2003).
- Oblomskii, Andrei M., "Rannesrednekovoye pamiatniki Verkhnego Podon'ia. Predvaritel'nye itogi issledovaniia," *Tambovskie drevnosti* 3 (2012), 172–229.
- Oblomskii, Andrei M., "Kolochinskaia kul'tura," in *Rannesrednekovoye drevnosti lesnoi zony Vostochnoi Evropy (V–VII vv.)*, eds. A.M. Oblomskii and I.V. Islanova (Moscow, 2016), 10–113.

- Oblomskii, Andrei M., "Rannesrednevekove poselenie Staevo-4 v Verkhnem Podon'e," in *Drevnosti. Issledovaniia. Problemy. Sbornik statei v chest' 70-letia N.P. Tel'nova*, eds. C.A. Sinika and R.A. Rabinovich (Chişinău/Tiraspol, 2017), 355–88.
- Oblomskii, Andrei M. and A.D. Shvyrev, "Vizantiiskaia gir'ka dlia vzveshivaniia monety, naidennaia v verkhov'iakh r. Voronezh," *KSIIA* 250 (2018), 307–26.
- Oblomskii, Andrei M. and Rostislav V. Terpylovs'kyi, "Novye pogrebeniia rannesrednekovykhkochevnikov na Sumshchine," in *Kochevniki uralo-kazakhstanskikh stepei. Sbornik nauchnykh trudov*, ed. A.D. Tairov (Ekaterinburg, 1993), 167–72.
- Oblomskii, Andrei M., Vladimir V. Priimak, and Rostislav V. Terpylovs'kyi, "Issledovaniia kolochinskoi kurgannoi gruppy Bezdrik v 2000 g.," *HAZ* 26 (2011), 15–29.
- Oborin, Vladimir A., "Nekotorye itogi i zadachi izucheniia zhelezного veka Verkhnego i Srednego Prikam'e," *VAU*, no. 1 (1961), 53–65.
- Oborin, Vladimir A., *Drevnee iskusstvo narodov Prikam'ia. Permskii zverinyi stil'* (Perm, 1976).
- Oborin, Vladimir A. and Georgii N. Chagin, *Chudskie drevnosti Rifeia. Permskii zverinyi stil'* (Perm, 1988).
- Odler, Martin, "Avarské sídliská v strednej Európe: problémová bilancia," *SMP* 11 (2012), 17–96.
- Ódor, János Gábor and Zsófia Rácz, "Szersámmelléletes sír a szekszárd-tószegi-dűlői avar temetőből," *MFMESEA* 12 (2011), 245–56.
- Oka, Rahul, and Chapurukha M. Kusimba, "The archaeology of trading systems, part 1: towards a new trade synthesis," *JAR* 16 (2008), 339–95.
- Okey, Robin, "Central Europe/Eastern Europe: behind the definitions," *Past & Present* 137 (1992), 102–33.
- Olajos, Teréz, *Les sources de Théophylacte Simocatta historien*, *Byzantina Neerlandica* 10 (Leiden, 1988).
- Olajos, Teréz, "Zametki k khronologii vtorzheniia rannikh slavian v Vizantiiu," *Studia Hungaro-Bulgarica* 2 (2008), 39–45.
- Oleinikov, O.M., "Kul'tura dlinnykh kurganov verkhnevolskogo i verkhnedneprovskogo regionov," *TAS* 6, no. 2 (2007), 166–84.
- Olster, David Michael, *The Politics of Usurpation in the Seventh Century: Rhetoric and Revolution in Byzantium* (Amsterdam, 1993).
- Olteanu, Ştefan, "Quelques remarques sur les activités industrielles pratiquées dans le territoire de la Roumanie aux IV<sup>e</sup>–XI<sup>e</sup> siècles," *SlovArch* 26, no. 1 (1978), 45–50.
- Olteanu, Ştefan, "Procédés d'influence slave pour la réduction du fer à l'est des Carpathes, au VI<sup>e</sup>–VII<sup>e</sup> siècles dans le contexte de la technologie traditionnelle des autochtones," in *Rapports du III<sup>e</sup> Congrès international d'archéologie slave. Bratislava 7–14 septembre 1975*, ed. B. Chropovsky, vol. 1 (Bratislava, 1979), 581–86.

- Olteanu, Ștefan, "Considerații privind obținerea fierului din minereu în așezarea din sec. VI–VII de la Ciurel, în lumina cercetărilor de laborator," *CAB* 3 (1981), 175–78.
- Olteanu, Ștefan, *Societatea carpato-danubiano-pontică în secolele IV–XI: structuri demo-economice și sociale* (Bucharest, 1997).
- Olteanu, Ștefan, *De la comunitatea obștească teritorială la constituirea statelor medievale românești de la mijlocul secolului al XIV-lea* (Bucharest, 2017).
- Olteanu, Ștefan and Nina Neagu, "Rezultatele cercetărilor de la Șirna-Prahova," *MCA* 15 (1983), 384–86.
- Olteanu, Ștefan, Nina Grigore, and Victor Nicolae, *Comunitatea sătească de la Șirna, județul Prahova (secolele II–X d.h.), în lumina izvoarelor arheologice* (Bucharest, 2007).
- Olteanu, Ștefan, Nina Neagu and D. Șecleman, "Tehnologia obținerii fierului din minereu și problema continuității istorice pe teritoriul României în mileniul I e. n.," *SCIVA* 32, no. 2 (1981), 217–32.
- Olteanu, Ștefan, Victor Teodorescu, and Nina Neagu, "Rezultatele cercetărilor arheologice de la Șirna," *MCA* 14 (1980), 417–22.
- Omel'kova, L.A., "Rannesrednevekovi mogil'nik v Bel'bekskoi doline," in *Vizantiia i sopredel'nyi mir. Sbornik nauchnykh trudov*, ed. M.A. Poliakovskaia (Sverdlovsk, 1990), 73–94.
- Opaït, Andrei, "Beobachtungen zur Entwicklung der zwei Amphoratypen," *Peuce* 9 (1984), 311–27.
- Opaït, Andrei, "Ceramica din așezarea și cetatea de la Independența (Murighiol) secolele V î. e. n.–VII e. n.," *Peuce* 10 (1991), 133–82.
- Opaït, Andrei, *Aspecte ale vieții economice din provincia Scythia (secolele IV–VI p. Ch.). Producția ceramicii locale și de import* (Bucharest, 1996).
- Opaït, Andrei, *Local and Imported Ceramics in the Roman Province of Scythia (4th–6th Centuries AD). Aspects of Economic Life in the Province of Scythia*, BAR International Series 1274 (Oxford, 2004).
- Opaït, Andrei and Teodor Bănică, "Das ländliche Territorium der Stadt Ibida (2.–7. Jh.) und einige Betrachtungen zum Leben auf dem Land an der unteren Donau," in *Die Schwarzmeerküste in der Spätantike und im frühen Mittelalter*, eds. R. Pillinger, A. Pülz, and H. Vettors, Schriften der Balkan-Kommission, Antiquarische Abteilung 18 (Vienna, 1992), 103–12.
- Oporeanu, Coriolan, Valentin Voisian, and Emilian Bota, "Mormântul unui războinic din epoca migrațiilor descoperit la Cluj-Napoca—'Polus,'" in *Dacia felix. Studia Michaeli Bărbulescu oblata*, S. Nemeti (Cluj-Napoca, 2007), 510–19.
- Oprîș, Ioan Carol and Alexandru Rațiu, *Capidava II. Building C 1—Contributions to the History of Annona Militaris in the 6th Century* (Cluj-Napoca, 2017).

- Opriş, Ioan Carol and Alexandru Raţiu, "The northern supply chain in *quaestura exercitus*. 6th to early 7th century amphorae at Capidava—archaeology of the *annona* for *limes Scythicus*," *Romanian Archaeological Institute in Athens Bulletin* (2019), 139–55.
- Oras, Ester, "East Baltic Middle Iron Age wealth deposits in burial areas: an example of regional cultural practice," *ArchB* 19 (2013), 61–80.
- Oras, Ester, *Practices of Wealth Depositing in the 1st–9th Century AD Eastern Baltic* (Leiden, 2015).
- Orlov, Ruslan S., "Kul'tura kochevnikov IV–VIII vv.," in *Etnokul'turnaia karta territorii Ukrainskoi SSR v I tys. n.e.*, eds. V.D. Baran, R.V. Terpylovs'kyi, and E.V. Maksimov (Kiev, 1985), 98–105.
- Orlov, Ruslan S. and Iurii Ia. Rassamakin, "Novye pamiatniki VI–VII iz Priazov'ia," in *Materialy I tys. n. e. po arkeologii i istorii Ukrainy i Vengrii*, eds. I. Erdélyi, O.M. Prikhodniuk, A.V. Simonenko, and E. Szimonova (Kiev, 1996), 102–16.
- Ostanina, Taisiia I., "Issledovaniia Udmurtskogo respublikanskogo muzeia," in *Arkeologicheskie otkrytiia 1978 goda*, ed. B.A. Rybakov (Moscow, 1979), 194–95.
- Ostanina, Taisiia I., "Nabornye poiasa iz Kuzebaevskogo klada VII veka," *PV* 19 (2017), 257–71.
- Ostanina, Taisiia I., O.M. Kanunnikova, V.P. Stepanov and A.B. Nikitin, *Kuzebaevskii klad iuvelira VII v. kak istoricheskii istochnik* (Izhevsk, 2011).
- Ovsiannikov, V.V., "Razvitie vooruzheniia v lesostepnom Priural'e vo vtoroi pol. I tysiacheletia n. e.," in *Kul'tury evraziiskikh stepei vtoroi poloviny I tysiacheletia n.e. (voprosy khronologii)*. *Materialy II Mezhdunarodnoi arkeologicheskoi konferencii, 17–20 noiabria 1997 g.*, eds. D.A. Stashenkov, A.F. Kochkina and L.V. Kuznecova (Samara, 1998), 295–302.
- Padin, V.A., "Ranneslavianskie poseleniia i mogil'nik v raione Trubchevska," *SA*, no. 3 (1960), 317–19.
- Padin, V.A., "Drevnosti VI–VII vv. n.e. v okrestnostiakh Trubchevska," in *Rannesrednevekoveye vostochnoslavianskie drevnosti*, ed. P.N. Tret'iakov (Leningrad, 1974), 132–35.
- Paisidou, Melina, S. Vasiliadou, and Krinio Konstantinidou, "METRO Thessalonikes 2010. To ergo tes ges EBA," *AEMT* 24 (2010), 223–34.
- Paliouras, Athanasios D., *Byzantine Aitolokarnania. Symbole ste byzantine kai metabyzantine mnemeiake techne* (Agrinion, 2004).
- Pánczél-Bajnok, Katalin, Péter Pánczél, György Szakmány, and Tivadar Vida, "5–6. századi, Pannonia területéről származó kerámiák archeometriai elemzése," *Archeometriai Műhely* 11, no. 1 (2014), 1–12.
- Pandura, Mariusz, "Ardarici gladius. Historia królestwa Gepidów (454–567)," *SlAnt* 45 (2004), 55–88.

- Panikars'kyi, Anton. "Dvokryli bistrìa stril zi slov'ians'kykh rann'oseredn'ovichnykh pam'iatok pìvдня skhidnoi Evropy," *Arkheologichni doslidzhennia L'vivs'kogo universytetu* 18 (2014), 111–27.
- Panov, Mitko B., "Reconstructing 7th century Macedonia: some neglected aspects of the *Miracles of St. Demetrius*," *Istorija* 47, no. 1 (2012), 93–115.
- Papp, László, "A bólyi avarkori temető I. Első közlemény," *JPME* 8 (1962), 163–94.
- Papp, László, "A nagyharsányi avarkori temető," *JPME* 9 (1963), 113–41.
- Paprenica, Jasna, "Vajuga-Pesak, nécropole I," *DS* 3 (1986), 223–27.
- Paraschiv, Dorel, *Amfore romane și romano-bizantine în zona Dunării de Jos (sec. I–VII p. Chr.)*, *Colectia Universitaria* 64 (Iasi, 2006).
- Parczewski, Michał, *Początki kultury wczesnosłowiańskiej w Polsce. Krytyka i datowanie źródeł archeologicznych*, *Prace Komisji Archeologicznej* 27 (Wrocław/Warsaw/Cracow, 1988).
- Parczewski, Michał, *Żukowice pod Głogowem w zaraniu średniowiecza*, *Głogowskie Zeszyty Naukowe* 2 (Głogów, 1989).
- Parczewski, Michał, "Origins of early Slav culture in Poland," *Antiquity* 65, no. 248 (1991), 676–83.
- Parczewski, Michał, *Die Anfänge der frühslawischen Kultur in Polen*, *Veröffentlichungen der Österreichischen Gesellschaft für Ur- und Frühgeschichte* 17 (Vienna, 1993).
- Parczewski, Michał, "Zu den Anfängen der Drehscheibenkeramik im westlichen Polen im Lichte des Fundmaterials aus Zukowice bei Głogów," in *Slawische Keramik in Mitteleuropa vom 8. bis zum 11. Jahrhundert. Terminologie und Beschreibung. Kolloquium Mikulčice, 24.–26. Mai 1994*, ed. L. Poláček, *Internationale Tagungen in Mikulčice* 1 (Brno, 1995), 9–14.
- Parczewski, Michał, "Rezultaty badań wykopaliskowych w Bachórz w latach 1993–1995," *Materiały i sprawozdania Rzeszowskiego Ośrodka Archeologicznego* 17, no. 3 (1996), 263–82.
- Parczewski, Michał, "Badania nad kulturą wczesnosłowiańską," in *Archeologia i prahistoria polska w ostatnim półwieczu. Materiały z konferencji Dorobek polskiej archeologii i prahistorii ostatniego półwiecza w Puszczykowie koło Poznania, 27–30 października 1997 r.*, eds. M. Kobusiewicz and S. Kurnatowski, *Prace Komisji Archeologicznej* 20 (Poznań, 2000), 413–21.
- Parczewski, Michał, "Wczesnosłowiańskie odkrycia w Bachórz, pow. Rzeszów," in *Polonia minor medii aevi. Studia ofiarowane Panu Profesorowi Andrzejowi Żakiemu w osiemdziesiątą rocznicę urodzin*, eds. Z. Woźniak and J. Garncarski (Cracow/Krosno, 2003), 191–209.
- Parczewski, Michał, "Stan dyskusji polskich archeologów nad etnogenezą Słowian," in *Archeologia o początkach Słowian. Materiały z konferencji, Kraków, 19–21 listopada 2001*, ed. P. Kaczanowski and M. Parczewski (Cracow, 2005), 503–12.



- Parshina, E.A., "Torzhishche v Partenitakh," in *Vizantiiskaia Tavrika. Sbornik nauchnykh trudov k XVIII kongresu vizantinistov*, ed. P.P. Tolochko (Kiev, 1991), 64–100.
- Park, Patrick S., and Yong-hak Kim, "Reciprocation under status ambiguity: how dominance motives and spread of status value shape gift exchange," *Social Networks* 48 (2017), 142–56.
- Parnell, David Alan., *Justinian's Men. Careers and Relationships of Byzantine Army Officers, 518–610* (London, 2017).
- Pashkevich, G.A., "Paleobotanicheskie issledovaniia v oblasti slavianskoi arkheologii," in *Trudy V Mezhdunarodnogo Kongressa arkheologov-slavistov, Kiev 18–25 sentiabria 1985 g.*, ed. V.D. Baran, vol. 4 (Kiev, 1988), 169–74.
- Pashkevich, G.A., "Paleobotanichni doslidzhennia materialiv Pastyrs'kogo gorodishcha," *Arkheolohiia*, no. 3 (1998), 40–51.
- Pashkevich, G.A. and Sergei A. Gorbanenko, "Katalog paleobotanichnykh materialiv pam'iatok slov'ians'kykh kul'tur," in *Kolektsii naukovykh fondiv Instytutu arkheologii NAN Ukrainy. Materialy ta doslidzhennia*, ed. G. Iu. Ivakin (Kiev 2010), 105–23.
- Paškavalin, Veljko, "Dva nalaza kasnoantichkih grobova na svod i kratak osvrt na dosadasnje nalaze tih grobnih kamera na teritoriji Bosne i Hercegovine," *GZMBH* 14 (1959), 150–62.
- Pastushenko, Igor Iu., "Issledovaniia Kisherts'kikh I poseleniia i mogil'nika," in *Arkheologicheskie otkrytiia Urala i Povolzh'ia*, N.A. Nagovicin (Izhevsk, 1991), 68–70.
- Pastushenko, Igor Iu., "K voprosu o zemledelii u naseleniia basseina r. Sylvy v epokhu srednevekov'ia," in *Issledovatel'skie tradicii v arkheologii Prikam'ia*, ed. O.A. Mel'nikova, Materialy i issledovaniia Kamsko-Viatskoi arkheologicheskoi ekspedicii 4 (Izhevsk, 2002), 267–77.
- Pásztor, Adrien, "A Szekszárd-Bogyiszló úti avar kori temető gyöngyleletei," *WMME* 23 (2001), 115–60.
- Pásztor, Adrien, "Gyöngyleletek a szegvár-omrodúlói avar kori temető szűrőkanalas sírjaiban," in *Avarok pusztái. Régészeti tanulmányok Lőrinczy Gábor 60. születésnapjára*, ed. A. Anders, Cs. Balogh and A. Türk, *Opitz Archaeologica* 6 (Budapest, 2014), 291–312.
- Pásztor, Adrien, "A Szegvár-Sárpoldali 7. századi sírcsoport gyöngyleletei," *AE* 143 (2018), 85–97.
- Pásztor, Adrien and Zsuzsanna Tóth, "Bone and antler working in the Avar cemetery of Bodajk," in *Hadak útján. A népvándorláskori fiatal kutatóinak XXVI. konferenciája. Gazdaság—kereskedelem—kézművesség*, eds. Zs. Rácz, I. Koncz and B. Gulyás (Budapest, 2018), 271–90.
- Patoura, Sophia, "Emporikes skheseis tes byzantines autokratorias kai ton laon tou kato Dounabe (40s–60s ai.). Arkhaiologikes martyries," in *4. Panellenio Historiko Synedrio. Praktika* (Thessaloniki, 1983), 91–105.

- Patoura, Sophia, "He epanastase tou Bitalianou tes Thrakes kai oi politikoi eligmoi tou Anastasiou," *Symmeikta* 15 (2002), 39–52.
- Pavlov, Borislav, "Dva komplekta srednoaziatski mǎzhki nakiti i paraden kavalerijski nabor ot kolektivnata nakhodka ot Malaia Pereshchepina (opit za formulirane na problema)," in *Prof. d.i.n. Stancho Vaklinov i srednovekovnata bǎlgarska kultura*, eds. K. Popkonstantinov, B. Borisov and R. Kostova (Veliko Tǎrnovo, 2005), 91–98.
- Pavlović, Daša, "The settlement and organization of early Slavic hamlets in Prekmurje, Slovenia," in *Dani Sjepana Gunjače 2. Zbornik radova sa znanstvenog skupa "Dani Stjepana Gunjače 2"; Hrvatska srednjovjekovna povijesno-arheološka baština, Međunarodne teme, Split, 18.–21. listopada 2011*, ed. T. Šeparović (Split, 2012), 317–34.
- Pavlović, Daša, "Zgodnjesrednjeveška poselitev severovzhodne Slovenije: primer najdišča Nova tabla pri Murski Soboti," Ph.D. Dissertation, Univerza na Primorskem (Koper, 2013).
- Pavlović, Daša, "Začetki zgodnjeslovanske poselitve Prekmurja," *AV* 68 (2017), 349–86.
- Pazaras, Theocharis N., "Anaskaphe palaiochristianikes basilikes sto Mbiagdoudi Epanomes 2000–2001," *AEMT* 15 (2001), 289–98.
- Pazdur, Mieczysław F., Romuald Awskiuk, Tomasz Goslar, and Anna Pazdur, "Chronologia radiowęglowa stanowiska w Haćkach," *Zeszyty Naukowe Politechniki Śląskiej. Matematyka-Fizyka. Geochronometria* 9 (1993), 27–46.
- Pečeliūnaitė-Bazienė, Elvyra, "2/2 sustiprinto ruoželinio pynimo audiniai I–XII a. Lietuvos pajūrio laidojimo paminkluose," *AL*. 5 (2004), 66–77.
- Pedersen, A., "Ancient monuments for new graves. An aspect of Viking Age burial customs in southern Scandinavia," in *Old Norse Religion in Long-Term Perspectives. Origins, Changes, and Interactions. An International Conference in Lund, Sweden, June 3–7, 2004*, eds. A. Andrén, K. Jennbert and C. Raudvere (Lund, 2006), 346–53.
- Pędziszewska, Anna, Małgorzata Latałowa, Joanna Świąta-Musznicka, Marcelina Zimny, Mirosława Kupryjanowicz, Agnieszka M. Noryśkiewicz, and Karolina Bloom, "Pollen evidence of change in environment and settlement during the 1st millennium AD," in *The Migration Period Between the Oder and the Vistula*, ed. A. Bursche, J. Hines and A. Zapolska, vol. 1, East Central and Eastern Europe in the Middle Ages, 450–1450 59 (Leiden/Boston, 2020), 137–98.
- Peets, Jüri, "Eesti rauast muinasajal," in *Arheoloogiline kogumik*, eds. L. Jaanits and V. Lang (Tallinn, 1991), 92–100.
- Peiser, Felix E., "Die Trinkörn-Ränder des Prussia-Museums," in *Festschrift Adalbert Bezzenberger zum 14. April 1921 dargebracht von seinen Freunden und Schülern* (Göttingen, 1921), 114–20.
- Peisker, Jan, "Die älteren Beziehungen der Slawen zu Turkotataren und Germanen und ihre sozialgeschichtliche Bedeutung," *Vierteljahresschrift zur Sozial- und Wirtschaftsgeschichte* 3 (1905), 187–360.

- Penchev, Vladimir, "Kolektivna nakhodka ot medni vizantiiski moneti ot vtorata polovina na VII v., namerena v Nesebăr," *Numizmatika* 25, nos. 3–4 (1991), 5–9.
- Pencheva, Elena, "Rannovizantiisko ukrepeno selishte v mestnostta 'Gradishte', zemlishteto na selo Kovachevci, Samokovsko," *INIM* 22 (2010), 29–52.
- Pencheva, Elena, "Keramichen proizvodstven kompleks ot VI v. ot Durostorum," in *Sbornik v pamet na akademik D.P. Dimitrov*, eds. K. Rabadzhiev, Khr. Popov, M. Damianov and V. Kacarova (Sofia, 2013), 569–77.
- Perevoshchikov, Stanislav E., "Kharakteristika zhelezoobrabotki v VI–XIII vv. (nevolinskoe i postnevolinskoe vremia) v basseine r. Sylvy," in *Drevnie remeslenniki Priural'ia. Materialy Vserossiskoi nauchnoi konferencii (Izhevsk, 21–23 noiabria 2000 g.)*, ed. V.I. Zav'ialov (Izhevsk, 2001), 238–63.
- Perevoshchikov, Stanislav E., *Zhelezoobrabatyvaiushchee proizvodstvo naseleniia Kamsko-Viatskogo mezhdurech'ia v epokhu srednevekov'ia (tekhnologicheskii aspekt)*, *Materialy i issledovaniia Kamsko-Viatskoi arkheologicheskoi ekspedicii 2* (Izhevsk, 2002).
- Perko, Verena Vidrih, "Seaborne trade routes in the northeast Adriatic and their connections to the hinterland in the Late Antiquity," in *L'Adriatico della tarda Antichità all'età carolingia. Atti del convegno di studio Brescia 11–13 ottobre 2001*, eds. G.P. Brogiolo and P. Delogu (Rome, 2005), 49–77.
- Peršič, Abram I., "Das Problem der militarischen Demokratie," in *Familie, Staat und Gesellschaftsformation. Grundprobleme vorkapitalistischer Epochen einhundert Jahren nach Friedrich Engels' Werk "Der Ursprung der Familie, des Privateigentums und des Staates"*, eds. J. Herrmann and J. Köhn, Veröffentlichungen des Zentralinstituts für Alte Geschichte und Archäologie der Akademie der Wissenschaften der DDR 16 (Berlin, 1988), 78–86.
- Peterburgskii, I.M., "K voprosu o kuznechnom i iuelirnom remeslakh mordvy (po raskopkam Shokshinskogo mogil'nika VI–X vv.)," in *Materialy po arkheologii i etnografii Mordovii*, ed. A.P. Smirnov, Trudy Nauchno-issledovatel'skogo instituta iazyka, literatury, istorii i ekonomiki 45 (Saransk, 1974), 42–56.
- Petersen, Ernst, "Nordische Goldbrakteaten aus dem Donaugebiet und ihre Bedeutung für die Herulerfrage," in *Laureae Aquincenses, memoriae Valentini Kuzsinszky dicatae*, vol. 2 (Budapest, 1941), 72–76.
- Petković, Sofija, "The traces of Roman metallurgy in Eastern Serbia," *Journal of Mining and Metallurgy* 45, no. 2 (2009), 187–96.
- Petković, Sofija, "Late Roman Romuliana and mediaeval Gamzigrad from the end of 4th to 11th centuries A.D.," in *Keszthely-Fenekpuszta im Kontext spätantiker Kontinuitätsforschung zwischen Noricum und Moesia*, ed. O. Heinrich-Tamáská (Budapest/Leipzig/Keszthely/Rahden, 2011), 267–84.
- Petković, Sofija and Maja Živić, "Tragovi metalurških aktivnosti u kasnoantichkoj Romulijani. Istrazhivanja 2002–2005," *GSAD* 22 (2006), 135–48.

- Petković, Sofija, Ivan Bugarski, and Nataša Miladinović-Radimilović, "A non-wandering soldier's grave? The seventh-century burial in Davidovac (southern Serbia)," in *GrenzÜbergänge. Spätromisch, frühchristlich, frühbyzantinisch als Kategorien der historisch-archäologischen Forschung an der mittleren Donau. Akten des 27. internationalen Symposiums der Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donaauraum, Ruma, 4.–7.11.2015*, eds. I. Bugarski, O. Heinrich-Tamáška, V. Ivanišević and D. Syrbe, *Forschungen zu Spätantike und Mittelalter* 4 (Remshalden, 2016), 247–72.
- Petković, Vladimir R., "Iskopavanje Caričinog Grada kod Lebana," *Starinar* 3 (1938), 81–92.
- Petre, Aurelian, *La romanité en Scythie Mineure (II<sup>e</sup>–VII<sup>e</sup> siècles de notre ère). Recherches archéologiques* (Bucharest, 1987).
- Petrenko, A.G., *Drevnee i srednevekovee zhivotnovodstvo srednego Privolzh'ia i Priural'ia* (Moscow, 1984).
- Petrenko, A.G., "K istorii khoziaistvennoi deiatel'nosti naseleniia nizhnego Prikam'ia I tys. n. e.," in *Kul'tury evraziiskikh stepei vtoroi poloviny I tysiacheletia n.e. (voprosy khronologii). Materialy II Mezhdunarodnoi arkheologicheskoi konferencii, 17–20 noiabria 1997 g.*, eds. D.A. Stashenkov, A.F. Kochkina, and L.V. Kuznecova (Samara, 1998), 198–212.
- Petrenko, Valerii P., "A picture stone from Grobin (Latvia)," *Formvänner* 86, no. 1 (1991), 1–9.
- Petridis, Platon, "Ateliers de potiers protobyzantins à Delphes," in *70 Diethnes Synedrio Mesaionikes Keramikes tes Mesogeiou. Thessalonike, 11–16 oktobriou 1999. Praktika*, ed. Ch. Bakirtzis (Athens, 2003), 443–46.
- Petridis, Platon, *La céramique protobyzantine de Delphes: une production et son contexte*, Fouilles de Delphes 5 (Paris, 2010).
- Petridis, Platon, "Romaika kai protobyzantina ergasteria keramikes ston elladiko choro," in *Keramike tes hysteres archaioteta apo ton elladiko choro (308–708 ai. m. Ch.). Epistemonike synantese, Thessaloniki, 12–16 noembriou 2006*, eds. D. Papanikola-Bakirtzis and D. Kousoulakou, *Demosieumata Archaialogikou Institutou Makedonikon kai Thrakikon Spoudon*, 8 (Thessaloniki, 2010), pp. 81–96.
- Petrov, V.P., "Stecovka, poselenie tret'ei cherverti I tysiacheletia n. e. (po materialam raskopok 1956–1958 v Potiasmine)," in *Slaviane nakanune obrazovaniia Kievskoi Rusi*, ed. B.A. Rybakov, *Materialy i issledovaniia po arkheologii SSSR* 108 (Moscow, 1963), 209–33.
- Petrovskaia, E.A. and D.Ia. Telegin, "Rann'oslov'ians'kii mogil'nik na r. Tiasmin," *Arkheolohiia* 18 (1965), 178–79.
- Petsas, Ph., "Thessalonike. Anaskaphe Panepistemioupoleos Thessalonikes," *AD* 21, B2 (1966), 334–39.

- Piaskowski, Jerzy, "Metallkundliche Untersuchungen an Eisengegenständen aus dem Gräberfeld von Környe," *AAASH* 26 (1974), 117–30.
- Piaskowski, Jerzy, "Untersuchungen der frühmittelalterlichen Eisen- und Stahltechnologie der Slawen in den Gebieten zwischen Weichsel und Oder," *ArchPol* 15 (1974), 67–96.
- Piaskowski, Jerzy, "Wczesnosłowiańska technologia żelaza na terenie Małopolski," *AAC* 25 (1986), pp. 149–77.
- Pietri, Charles, "La géographie de l'Illyricum ecclésiastique et ses relations avec l'Eglise de Rome (V<sup>e</sup>–VI<sup>e</sup> siècles)," in *Villes et peuplement dans l'Illyricum protobyzantin. Actes du colloque organisé par l'École française de Rome (Rome, 12–14 mai 1982)*, Collection de l'École Française de Rome 77 (Rome, 1984), 21–59.
- Pillinger, Renate, "Ein frühchristliches Grab mit Psalmzitaten in Mangalia/Kallatis (Rumänien)," in (eds), *Die Schwarzmeerküste in der Spätantike und im frühen Mittelalter*, eds. R. Pillinger, A. Pülz and H. Vetters, Schriften der Balkan-kommission. Antiquarische Abteilung 18 (Vienna, 1992), 97–102.
- Pillon, Michel, "L'exode des Sermésiens et les grandes migrations des Romains de Pannonie dans les Balkans durant le Haut Moyen Age," *EB* 38, no. 3 (2002), 103–41.
- Pintér-Nagy, Katalin, "A hadjáratra, csatára történő felkészülés módjai az avar hadseregben," in *Népék és kultúrák a Kárpát-medencében. Tanulmányok Mesterházy Károly tiszteletére*, eds. L. Kovács and L. Révész (Budapest, 2016), 353–64.
- Pintér-Nagy, Katalin, "A Pácín-Szenna-domb lelőhely VI–VII. századra datálható teleprészének lakóépületei," in "*Vadrózsából tündérsípót csináltam*." *Tanulmányok Istvánovits Eszter 60. születésnapjára*, ed. A. Szemán (Nyíregyháza, 2018), 491–504.
- Piontek, Janusz, "Origin of the Slavs as a pretext for discussion," *ArchPol* 44 (2006), 317–31.
- Plavinskii, Nikolai A., "K voprosu o pogrebal'noi obriadnosti naseleniia mezhdurech'ia Zapadnoi Dviny i Vilii v tre'tei chetverti I tys. n. e.," *Stratum+*, no. 5 (2013), 63–72.
- Pleiner, Radomír, "Experimental smelting of steel in early medieval furnaces," *PA* 60, no. 2 (1969), 458–87.
- Pleiner, Radomír, *Iron in Archaeology. The European Bloomery Smelters* (Prague, 2000).
- Pleiner, Radomír, *Iron in Archaeology. Early European Blacksmiths* (Prague, 2006).
- Pleinerová, Ivana, "Sídliště z období pražského typu v Březně u Loun," in *Referáty o pracovních výsledcích československých archeologů* (Liblice, 1959), 90–99.
- Pleinerová, Ivana, *Březno. Vesnice prvních Slovanů v severozápadních Čechách*, Památníky naší minulosti 8 (Prague, 1975).
- Pleinerová, Ivana, "K sídelní a hospodářské soustavě u nejstarších Slovanů (podle poznatků výzkumu v Březně)," *SlAnt* 30 (1984–1987), 51–61.
- Pleinerová, Ivana, "Březno: experiments with building Old Slavic houses and living in them," *PA* 77, no. 1 (1986), 104–76.

- Pleinerová, Ivana, *Die altslawischen Dörfer von Březno bei Louny* (Prague/Louny, 2000).
- Pleinerová, Ivana, "Studny z doby stěhování národů v Hostivici-Paloukách, okr. Praha-západ," *PA* 6 (2005), 105–26.
- Pleinerová, Ivana and Evžen Neustupný. "K otázce stravy ve staroslovanském období (Experiment v Březne)," *AR* 39 (1987), 90–101 and 117–19.
- Pletneva, Svetlana A., "Nomadski poselishta prez VII–IX v. v Priazovieto i baseina na reka Don," *Arkheologija* 6, no. 4 (1964), 1–8.
- Pletneva, Svetlana A., *Ot kochevyi k gorodam: saltovo-maiackaia kul'tura* (Moscow: Nauka, 1967).
- Pletneva, Svetlana A., *Kochevniki srednevekov'ia. Poiski istoricheskikh zakonomernosti* (Moscow, 1982).
- Pletn'ov, Valentin, *Varna prez srednevekoviето* (Varna, 2008).
- Pletn'ov, Valentin, "Za slavianskoto prisăstvie v raiona na Odesos i 'taka narechenata Varna," in *Bălgariia, bălgarite i Evropa. Mit, istoriia, săvremie. IV (Dokladi ot Mezhdunarodna konferenciia v pamet na prof. d.i.n. Jordan Andreev "Bălgariia, zemia na blazheni ...", V. Tărnovo, 29–31 oktombri 2009 g., eds. S. Dermendzhieva and D. Dimitrov (Veliko Tărnovo, 2011), 105–27.*
- Pletn'ov, Valentin, *Odesos, Varna i raionăt v antichnite i srednevekovnite izvori (V–XII vek, Varna i raionăt v istoricheskite izvori (V–XIX vek) 1* (Varna, 2014).
- Pobol', Leonid D., "Starazhytnyia paselishchy na siaredniai Biarezine," in *Belaruskii starazhytnasci. Materyialy kanferencyi pa arkheologii BSSR i sumezhnykh terytoryi*, ed. L.D. Pobol' (Minsk, 1972), 117–49.
- Pobol', Leonid D., "Arkheologicheskie izyskaniia v Taimanove," in *Arkheologicheskie otkrytiia 1973 goda*, ed. B.A. Rybakov (Moscow, 1974), 378.
- Pochitonov, Eugen, "Nález antických mincí v Hlinsku v Čechách," *Numismatický sborník* 1 (1953), 109.
- Podgórska-Czopek, Joanna, *Grodzisko Dolne, stanowisko 22 - wielokulturowe stanowisko nad dolnym Wisłokiem. Część II. Okres rzymski i wczesnostowiański*, *Collectio Archaeologica Ressoviensis* 12 (Rzeszów, 2009).
- Podosinov, Aleksandr V., *Problemy istoricheskoi geografii Vostochnoi Evropy (antichnost' i rannee srednevekov'e)* (Leiwston/Queenston/Lampeter, 2000).
- Pohl, Walter, "Historische Überlegungen zum awarisch-byzantinischen Austausch," *WMME* 15 (1990), 91–96.
- Pohl, Walter, "Zur Dynamik barbarischer Gesellschaften: das Beispiel der Awaren," *Klio* 73 (1991), 595–600.
- Pohl, Walter, "Die Langobarden in Pannonien und Justinians Gotenkrieg," in *Ethnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis zum 11. Jahrhundert. Symposium Nitra 6. bis 10. November 1994*, eds. D. Bialeková and J. Zábajnik (Bratislava, 1996), 27–36.

- Pohl, Walter, "The Empire and the Lombards: treaties and negotiations in the sixth century," in *Kingdoms of the Empire. The Integration of Barbarians in Late Antiquity*, ed. W. Pohl, The Transformation of the Roman World 1 (Leiden, 1997), 75–133.
- Pohl, Walter, "A non-Roman empire in Central Europe: the Avars," in *Regna and Gentes. The Relationship Between Late Antique and Early Medieval Peoples and Kingdoms in the Transformation of the Roman World*, eds. H.-W. Goetz, J. Jarnut, and W. Pohl, The Transformation of the Roman World 13 (Leiden/Boston, 2003), 571–95.
- Pohl, Walter, "Übergänge von der Antike zum Mittelalter—eine unendliche Debatte?" in *Römische Legionslager in den Rhein- und Donauprovinsen. Nuclei spätantik-frühmittelalterlichen Lebens?*, ed. M. Konrad, Abhandlungen der Bayerischen Akademie der Wissenschaften, Philosophisch-historische Klasse 138 (Munich, 2011), 47–61.
- Pohl, Walter, *The Avars. A Steppe Empire in Central Europe, 567–822* (Ithaca, 2018).
- Polanyi, Karl, "The economy as instituted process," in *Trade and Market in the Early Empires*, eds. K. Polanyi, C.M. Arensberg and H.W. Pearson (Glencoe, 1957), 243–70.
- Polek, Krzysztof, "Państwo Samona w nowych badaniach archeologicznych i historycznych," in *Cognitioni gestorum. Studia z dziejów średniowiecza dedykowane Profesorowi Jerzemu Strzelczykowi*, ed. D.A. Sikorski and A.M. Wyrwa (Warsaw, 2006), 41–51.
- Poleska, Paulina and Janusz Bober, "Wczesnosłowiańska półziemianka ze stanowiska 5B (Wyciąże) w Krakowie-Nowej Hucie," *MANH* 19 (1996), 101–28.
- Poleska, Paulina, Janusz Bober, and Marek Krąpiec, "Das erste dendrochronologisch datierte frühslawische Grubenhaus aus Polen," *Archaeoslavica* 3 (1998), 33–70.
- Polesskikh, M.R., "Boevoe oruzhie i snariazhenie iz mogil'nikov Armievskogo tipa," *SA*, no. 1 (1968), 198–207.
- Polesskikh, M.R., "Armievskii mogil'nik," in *Arkheologicheskie pamiatniki mordvy I tysiacheletia n. e.*, ed. G.A. Fedorov-Davydov, Trudy Nauchno-issledovatel'skogo instituta iazyka, literatury, istorii i ekonomiki pri Sovete Ministrov Mordovskoi ASR 63 (Saransk, 1979), 5–56.
- Polgár, Szabolcs, "Kereszténység Kelet-Európában: a Krímben és a ruszok között," in *Térítés—megtérés. A világvallások terjedése Kelet-Európá népei között*, eds. L. Balogh and S. Kovács (Budapest, 2009), 129–40.
- Poliakov, Iurii A., "Raskopki kurganov na nizhnei Sylve," in *Arkheologicheskie otkrytiia 1982 goda*, ed. B.A. Rybakov (Moscow, 1984), 171–72.
- Popescu, Dorin, "Cercetări arheologice în Transilvania," *MCA* 2 (1956), 43–152.
- Popescu, Dorin, "Das gepidische Gräberfeld von Morești," *Dacia* 18 (1974), 189–238.
- Popescu, Emilian, *Inscriptiile grecești și latine din secolele IV–XIII descoperite în România* (Bucharest, 1976).

- Popescu, Emilian, "Le village en Scythie Mineure (Dobroudja) à l'époque proto-byzantine," in *Les villages dans l'Empire byzantin, IV<sup>e</sup>-XV<sup>e</sup> siècles*, eds. J. Lefort, C. Morrisson, and J.-P. Sodini (Paris, 2005), 363–80.
- Popilian, Gheorghe and Marin Nica, *Groșani. Monografie arheologică*, Bibliotheca Thracologica 24 (Bucharest, 1998).
- Popović, Ivana, "Les particularités de l'outillage protobyzantin dans les Balkans du Nord," *Starinar* 45–46 (1994–1995), 67–75.
- Popović, Ivana, "Les nécropoles du V<sup>e</sup> et VI<sup>e</sup> siècle," in *Sirmium à l'époque des grandes migrations*, eds. I. Popović, M. Kazanski and V. Ivanišević, Monographies du Centre de recherche d'histoire et civilisation de Byzance 53 (Leuven/Paris/Bristol, 2017), 39–92.
- Popović, Ivana, "Sirmium au V<sup>e</sup> et VI<sup>e</sup> siècle: les sources écrites et les données archéologiques," in *Sirmium à l'époque des grandes migrations*, eds. I. Popović, M. Kazanski and V. Ivanišević, Monographies du Centre de recherche d'histoire et civilisation byzantine 53 (Leuven, 2017), 7–24.
- Popović, Ljubiša and Emil Čerškov, "Ulpiana. Prethodni izveštaj o arheološkim istraživanjima od 1954 do 1956 god," *Glasnik muzeja Kosova i Metohije* 1 (1956), 319–26.
- Popović, Marko, "Svetinja, novi podaci o ranovizantijskom Viminacijumu," *Starinar* 38 (1987), 1–37.
- Popović, Marko and Vesna Bikić, *Vrsenice, kasnoantičko i srpsko ranosrednjovekovno utvrđenje* (Belgrade, 2009).
- Popović, Vladislav, "Byzantins, Slaves et autochtones dans les provinces de Prévalitane et Nouvelle Epire," in *Villes et peuplement dans l'Illyricum protobyzantin. Actes du colloque organisé par l'École Française de Rome, Rome 12–14 mai 1982*, Collection de l'École Française de Rome 77 (Rome, 1984), 181–243.
- Porzeziński, Antoni, "Dotychczasowe wyniki badań na osadzie wczesnośredniowiecznej w Dziedzicach, pow. Myślibórz," *SArch* 24 (1972), 149–61.
- Porzeziński, Antoni, "Sprawozdanie z badań archeologicznych na osadzie wczesnośredniowiecznej w Derczewie, pow. Myślibórz," *SArch* 27 (1975), 165–73.
- Porzeziński, Antoni, "Z badań nad problematyką osadnictwa najstarszej fazy wczesnego średniowiecza na Pomorzu Zachodnim," *Materiały Zachodnio-Pomorskie* 26 (1980), 115–44.
- Poska, Anneli, Leili Saarse, and Siim Veski. "Reflections of pre- and early-agrarian human impact in the pollen diagrams of Estonia," *Palaeogeography, Palaeoclimatology, Palaeoecology* 209 (2004), 37–50.
- Postică, Gheorghe, *Civilizația medievală timpurie din spațiul pruto-nistean (secolele V–XIII)*, Bibliotheca Archaeologica Moldaviae 7 (Bucharest, 2007).



- Postică, Gheorghe, "Obști sătești și formațiuni teritoriale românești din perioada medievală timpurie în spațiul pruto-nistrean," *Destin românesc* 2, nos. 1–2 (2007), 188–214.
- Potts, Daniel T. *Nomadism in Iran. From Antiquity to the Modern Era* (Oxford, 2014).
- Poulík, Josef, "Žuráň in der Geschichte Mitteleuropas," *SlovArch* 43, no. 1 (1995), 27–109.
- Poulou-Papadimitriou, Natalia, Elli Tzavella, and Jeremy Ott, "Burial practices in Byzantine Greece: archaeological evidence and methodological problems for its interpretation," in *Rome, Constantinople and Newly-Converted Europe. Archaeological and Historical Evidence*, eds. M. Salamon, M. Wołoszyn, A.E. Musin and P. Špehar, vol. 1, *U źródeł Europy Środkowo-Wschodniej 1.1* (Cracow/Leipzig/Rzeszów/Warsaw, 2012), 377–428.
- Poulter, Andrew G., "The use and abuse of urbanism in the Danubian provinces during the Later Roman Empire," in *The City in Late Antiquity*, ed. J. Rich, Leicester-Nottingham Studies in Ancient Society 3 (New York, 1992), 99–135.
- Poulter, Andrew G., "Cataclysm on the Lower Danube: the destruction of a complex Roman landscape," in *Landscapes of Change. Rural Evolutions in Late Antiquity and the Early Middle Ages*, ed. N. Christie (Hants/Burlington, 2004), 223–53.
- Poulter, Andrew G., "The Bulgarian-British research programme in the countryside and on the site of an early Byzantine fortress: the implications for the Lower Danube in the 5th to 6th centuries AD," in *The Lower Danube in Antiquity (VI c. B.C.–VI c. AD). International Archaeological Conference, Bulgaria-Tutrakan, 6.–7.10.2005*, ed. L. Vagalinski (Sofia, 2007a), 361–84.
- Poulter, Andrew G., "The transition to Late Antiquity on the Lower Danube: the city, a fort, and the countryside," in *The Transition to Late Antiquity on the Danube and Beyond*, ed. A.G. Poulter, Proceedings of the British Academy 141 (Oxford, 2007b), 51–97.
- Poulter, Andrew G., *The Transition to Late Antiquity on the Lower Danube. Excavations in Dichin: an Extraordinary Late Roman and Early Byzantine Fort, Intensive Site-Specific Survey and a Unique Roman Aqueduct* (Oxford, 2019).
- Preda, Constantin, "Tipar pentru bijuterii din sec. VI e.n. descoperit la Olteni (r. Videle, reg. București)," *SCIV* 18, no. 3 (1967), 513–20.
- Preda, Constantin, "Circulația monedelor bizantine în regiunea carpato-dunăreană," *SCIV* 23, no. 4 (1972), 375–415.
- Preda, Constantin, *Callatis. Necropola romano-bizantină*, Biblioteca de arheologie 38 (Bucharest, 1980).
- Preidel, Helmut, "Awaren und Slawen," *Südost-Forschungen* 11 (1946–1952), 33–45.
- Preiser-Kapeller, Johannes, "The climate of the khagan. Observations on palaeoenvironmental factors in the history of the Avars (6th–9th century)," in *Lebenswelten zwischen Archäologie und Geschichte. Festschrift für Falko Daim zu seinem 65.*

- Geburtstag*, eds. J. Drauschke et al., Monographien der Römisch-Germanischen Zentralmuseums, 150.1 (Mainz, 2018), 311–24.
- Preložnik, Andrej, “Fibula s podobo Haris iz Nina—poreklo in pomen,” in *Srednji vek. Arheološki raziskave med Jadranskim morjem in Panonsko nižino*, ed. M. Guštin (Ljubljana, 2008), 203–09.
- Prendi, Frano, “Një varrëze e kulturës arbërore në Lezhë,” *Iliria* 9–10 (1979–1980), 123–70.
- Priimak, Vladimir V., “Idei E.A. Goriunova v svete izucheniiia sistem rasseleniia Dneprovskogo Levoberezh'ia I tys. n. e.,” in *Kul'turnye transformacii i vzaimovlianiia v Dneprovskom regione na iskhode rimskogo vremeni i v rannem Srednevekov'e. Doklady nauchnoi konferencii, posviashchennoi 60-letiiu so dnia rozhdeniia E.A. Goriunova (Sankt-Peterburg, 14–17 noiabria 2000 g.)*, eds. V.M. Goriunova and O.A. Shcheglova, Trudy Instituta istorii material'noi kul'tury 11 (St. Petersburg, 2004), 282–87.
- Priimak, Vladimir V. and Aleksandr B. Suprunenko, *Malopereshchepyns'kyi “skarb”* (Poltava, 2005).
- Princová-Justová, Jarmila, “Časně slovanské osídlení v Libici nad Cidlinou,” *PA* 94 (2003), 161–82.
- Profantová, Naďa, “Časne slovanská lící pánvička z Kadaňe,” *AR* 50, no. 2 (1998), 433–35.
- Profantová, Naďa, “Nové objekty kultury s keramikou pražského typu z Roztok u Prahy,” *PA* 96 (2005), 127–64.
- Profantová, Naďa, “Problém rozpoznatelnosti dílen u nejstarších Slovanů,” *SMP* 7 (2006), 113–29.
- Profantová, Naďa, “Náhrdelníky byzantského (?) původu a bronzové kruhové ozdoby ve slovanském prostředí 6.–7. století,” *PA* 104 (2013), 149–82.
- Profantová, Naďa and Martin Kuna, “Slov'ians'ke selishche Roztoky VI–VII st. bilia Prahy, Chekhiiia,” *Arkheolohiia*, no. 4 (2011), 81–89.
- Prohászka, Péter, “Die awarischen Oberschichtgräber von Ozora-Tótipuszta (Kom. Tolna, H),” in *Byzanz—das Römerreich im Mittelalter. Teil 3. Peripherie und Nachbarschaft*, eds. F. Daim and J. Drauschke, Monographien des Römisch-Germanischen Zentralmuseums 84 (Mainz, 2010), 188–276.
- Prokopov, A.V., “Ranniaia istoriia zemledeliia v Prikam'e,” in *Etnicheskie processy na Urale i v Sibiri v pervobytniuiu epokhu*, eds. V.E. Maier and V.E. Vladykin (Izhevsk, 1983), 96–102.
- Pronin, G.N., “Issledovanie pamiatnikov vtoroi poloviny I tys. n. e. v vostochnykh raionakh Novgorodchiny,” *SA*, no. 4 (1988), 169–80.
- Prostko-Prostyński, Jan, “‘Ziemia ich nie zna żelaza’. Glosa do Historiae VI.2 Teofylakta Simokatty,” in *Viator per devia scientiae itinera. Studia nad problematyką okresów przedrzymskiego, rzymskiego, wędrowek ludów i wczesnego średniowiecza*, eds.

- A. Michałowski, M. Teska and M. Żółkiewski, *Seria Archeologia* 53 (Poznań, 2015), 321–26.
- Prykhodniuk, Oleg M., *Slov'iani na Podilli (VI–VII st. n.e.)* (Kiev, 1975).
- Prykhodniuk, Oleg M., “Arkheologichny rozvydki v Porossy,” *Arkheolohiia* 31 (1979), 83–96.
- Prykhodniuk, Oleg M., *Arkheologichni pam'iatky seredn'ogo Prydniprov'ia VI–IX st. n. e.* (Kiev, 1980).
- Prykhodniuk, Oleg M., “Novye dannye o pen'kovskoi kul'ture v Srednem Podneprov'e,” in *Ranneslavianskii mir. Materialy i issledovaniia*, eds. S.A. Pletneva and I.P. Rusanova, *Ranneslavianskii mir* 1 (Moscow, 1990), 75–108.
- Prykhodniuk, Oleg M., *Pen'kovskaia kul'tura: kul'turno-khronologicheskii aspekt issledovaniia* (Voronezh, 1998).
- Prykhodniuk, Oleg M., *Pastyr's'ke gorodyshche* (Kiev/Chernivtsi, 2005).
- Prykhodniuk, Oleg M. and Viktor Fomenko, “Early medieval nomads' burials from the vicinity of the village of Hristoforovka, the district of Nikolaevo, Ukraine,” *AB* 7 (2003), 107–16.
- Prykhodniuk, Oleg M. and Sergei A. Gorbanenko, “Sil's'ke gospodarstvo zhyteliv rann'oseredn'ovichnogo Pastyr's'kogo gorodyshcha,” *Arkheolohiia*, no. 2 (2008), 48–59.
- Prykhodniuk, Oleg M. and Vladimir M. Khardaev, “Kharivskii klad,” *Archaeoslavica* 3 (1998), 240–70.
- Prykhodniuk, Oleg M. and Vladimir M. Khardaev, “Ein Edelmetallfund des 6.–7. Jahrhunderts aus Keledej, Ukraine,” *EA* 7 (2001), 585–613.
- Prykhodniuk, Oleg M., V.A. Padin, and N.G. Tikhonov. “Trubchevskii klad antskogo vremeni,” in *Materialy I tys. n. e. po arkheologii i istorii Ukrainy i Vengrii*, eds. I. Erdélyi, O.M. Prykhodniuk, A.V. Simonenko and E. Szimonova (Kiev, 1996), 79–102.
- Puzikova, A.I., “Gorodishche u der. Nartovo pod Kurskom,” in *Voprosy drevnei i srednevekovoi arkheologii Vostochnoi Evropy*, eds. V.I. Kozenkova, Iu. A. Krasnov, and I.G. Rozenfel'dt (Moscow, 1978), 49–55.
- Quast, Dieter, “Byzantinisch-gepidische Kontakte nach 454 im Spiegel der Kleinfunde,” in *International Connections of the Barbarians of the Carpathian Basin in the 1st–5th Centuries A.D. Proceedings of the International Conference Held in 1999 in Aszód and Nyíregyháza*, eds. E. Istvánovits and V. Kulcsár, *Múzeumi füzetek* 51 (Nyíregyháza/Aszód, 2001), 431–52.
- Quast, Dieter, “Ein skandinavisches Spathascheidemundblech der Völkerwanderungszeit aus Pikkjärve (Pölvamaa, Estland),” *Jahrbuch des Römisch-Germanischen Zentralmuseums* 51, no. 1 (2004), 243–79.
- Quast, Dieter, “Funde aus dem fränkisch-alamannischen Gebiet im langobardenzeitlichen Pannonien,” in *Kulturwandel in Mitteleuropa. Langobarden—Awaren—Slawen*.

- Akten der Internationalen Tagung in Bonn vom 25. bis 28. Februar 2008*, eds. J. Bemmann and M. Schmauder, *Kolloquien zur Vor- und Frühgeschichte 11* (Bonn, 2008), 363–76.
- Quast, Dieter, “Die Langobarden in Mähren und im nördlichen Niederösterreich—ein Diskussionsbeitrag,” in *Archaeology of Identity—Archäologie der Identität*, eds. W. Pohl and M. Mehofer, *Forschungen zur Geschichte des Mittelalters 17* (Vienna, 2009), 93–110.
- Quast, Dieter, “Das Ostseegebiet und die nördliche Grenzzone des byzantinischen Reiches im späten 6. und 7. Jahrhundert,” in *Relationes rerum. Régészeti tanulmányok Nagy Margit tiszteletére*, eds. Cs. Balogh, B. Major and A. Türk (Budapest, 2018), 521–36.
- Quirós Castillo, Juan Antonio, “Inequality and social complexity in peasant societies. Some approaches to early medieval northwestern Iberia,” in *Social Complexity in Early Medieval Rural Communities. The North-Western Iberia Archaeological Record*, ed. J.A. Quirós Castillo (Oxford, 2016), 1–16.
- Rácz, Zsófia, “Avar kori ötvös- és kovácsszerszámok,” in *A vasművesség évezredei a Kárpát-medencében*, eds. Z. Nagy and J. Szulovszky (Szombathely, 2009), 67–96.
- Rácz, Zsófia, “Sind Goldschmiede in den ‘Goldschmiedegräbern’ der Awarenzeit bestattet?” in *Macht des Goldes, Gold der Macht. Herrschafts- und Jenseitsrepräsentation zwischen Antike und Frühmittelalter im mittleren Donauraum. Akten des 23. internationalen Symposiums der Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donauraum, Tengelic, 16.–19. 11. 2011*, eds. M. Hardt and O. Heinrich-Tamáska, *Forschungen zur Spätantike und Mittelalter 2* (WeinStadt, 2013), 361–80.
- Rácz, Zsófia, *Die Goldschmiedegräber der Awarenzeit*, *Monographien des Römisch-Germanischen Zentralmuseums 116* (Mainz, 2014).
- Rácz, Zsófia, “Ein frühmittelalterlicher Pressmodellfund aus dem mittleren Dnjepr-Gebiet,” in *Zwischen Byzanz und der Steppe. Archäologische und historische Studien. Festschrift für Csanád Bálint zum 70. Geburtstag*. Eds. Á. Bollók, G. Csiky and T. Vida (Budapest, 2016), 175–82.
- Rácz, Zsófia and Zoltán May, “Öntőminta pajzsos testű csat készítéséhez,” in *Fémekek a földből. I*, eds. G. Bíró, A. Katona-Kiss and Z. Rózsa (Orosháza, 2018), 50–51.
- Rácz, Zsófia and Gergely Szenthe, “Avar temető Hajdúnánás határában,” *CAH* (2009), 309–35.
- Radimsky, W., “Römische Gräber bei Han Potoci nächst Mostar,” *WMBH* 1 (1893), 303–07.
- Radiush, O.A., “Lamelliarnyi shlem epokhi pereseleniia narodov iz Kurskoi oblasti,” in *Drevnosti Dneprovskogo Levoberezh'ia ot kamennogo veka do pozdnego srednevekov'ia (k 80-letiiu so dnia rozhdeniia A.I. Puzikovoi)*. *Sbornik nauchnykh trudov* (Kursk, 2012), 202–08.

- Radiush, O.A., "Shlemy epokhi pereseleniia narodov iz Podneprov'ia," in *Voinskie tradicii v arkeologicheskom kontekste: ot pozdnego latena do pozdnego srednevekov'ia. Materialy konferencii. Noiabr 2012 g.*, ed. I.G. Burcev (Tula, 2014), 40–53.
- Radoměřský, Pavel, "Byzantské mince z pokladu v Zemianském Vrbovku," *PA* 44 (1953), 109–27.
- Radu, Laurențiu and Aurel Stănică, "Un cuptor pentru ars ceramica descoperit la Noviodunum," *Pontica* (2012), 477–88.
- Rădulescu, Adrian, "Amfore cu inscripții de la Edificiul roman cu mozaic din Tomis," *Pontica* 6 (1973), 193–208.
- Rădulescu, Adrian and Virgil Lungu, "Le christianisme en Scythie Mineure à la lumière des dernières découvertes archéologiques," in *Actes du XI<sup>e</sup> Congrès international d'archéologie chrétienne. Lyon, Vienne, Grenoble, Genève et Aoste (21–28 septembre 1986)*, eds. N. Duval, F. Baritel and Ph. Pergola, vol. 3, *Studi di antichità cristiana* 41 (Rome, 1989), pp. 2561–615.
- Rafalovich, I.A., "Ranneslavianskie selishche Hucha VI–VII vv.," *KSIA* 105 (1965), 123–28.
- Rafalovich, I.A., "Poseleniia VI–VII vv. u s. Hanska," *KSIA* 113 (1968), 75–103.
- Rafalovich, I.A., "Raskopki ranneslavianskogo poseleniia VI–VII vv. n. e. u sela Selishte," in *Arkheologicheskie issledovaniia v Moldavii v 1968–1969 gg.*, ed. I.A. Rafalovich (Kishinev, 1972), 122–42.
- Rafalovich, I.A. and Nataliia V. Gol'ceva, "Ranneslavianskoe poselenie V–VII vv. Dancheni I," in *Arkheologicheskie issledovaniia Moldavii v 1974–1976 gg.* (Kishinev, 1981), 125–40.
- Rafalovich, I.A. and V.L. Lapushnian, "Raboty Reutskoi arkeologicheskoi ekspedicii," in *Arkheologicheskie issledovaniia v Moldavii (1972 g.)* (Kishinev, 1973), 110–47.
- Rafalovich, I.A. and V.L. Lapushnian, "Mogil'niki i ranneslavianskoe gorodishche u s. Selishte," in *Arkheologicheskie issledovaniia v Moldavii (1973 g.)*, ed. V.I. Markevich (Kishinev, 1974), 104–39.
- Raffensperger, Christian, "The place of Rus' in medieval Europe," *History Compass* 12, no. 11 (2014), 853–65.
- Raffensperger, Christian, *Conflict, Bargaining and Kinship Networks in Medieval Eastern Europe* (Lanham, 2018).
- Rakocija, Miša, "Ranovizantijska grobnica na svod kod sela Klisura pored Nisha i kratak osvrt na problem zasvedenikh grobnica," in *Niš and Byzantium. II Symposium, Niš, 3–5 June 2003. The Collection of Scientific Works* 2, ed. M. Rakocija (Niš, 2004), 141–64.
- Rance, Philip R., "Maurice's *Strategicon* and 'the ancients': the late antique reception of Aelian and Arrian," in *Greek Taktika. Ancient Military Writing and its Heritage. Proceedings of the International Conference on Greek Taktika Held at the University of Toruń, 7–11 april 2005*, eds. Ph.R. Rance and N. Sekunda, *Akanthina* 13 (Gdańsk, 2017), 217–55.

- Ranisavljev, Aleksandar, *Ranosrednjovekovna nekropola kod Mokrina*, Povremena izdanja 4 (Belgrade, 2007).
- Raptis, Konstantinos T., "Early Christian and Byzantine ceramic production workshops in Greece: typology and distribution," in *Atti del IX Congresso internazionale sulla ceramica medievale nel Mediterraneo. Venezia, Scuola Grande dei Carmini, Auditorium Santa Margherita, 23–27 novembre 2009*, ed. S. Gelichi (Florence, 2012), 38–43.
- Raptis, Konstantinos T., "He domike apokatastase tes Acheiropoietou kata ton 7o aiona kai he semasia tes gia ten astike synecheia tes Thessalonikes kata tous 'skoteinous aiones'," in *Ktitor. Apheroma ston daskalo Georgio Beleni*, eds. I.D. Varalis and Ph. Karagianni (Thessaloniki, 2017), 289–306.
- Rasadzin, S. Ia., "Garadzishcha-skhovishcha Zalataino u Belaruskim Pasozhzhzy," *Vesci Akademii Nauk BSSR. Seryia gramadskikh navuk* 2 (1985), 75–79.
- Rashev, Rasho, *Prabǎlgarite prez V–VII vek* (Veliko Tǎrnovo, 2000).
- Rashev, Rasho, "Zlatnite prǎsteni s krǎstovidni monogrami ot Malaia Pereshchepina: poslednite chetenii i interpretacii," in *Iubileen sbornik "Sto godini ot rozhdenieto na d-r Vasil Kharalanov (1907–2007)"*, eds. I. Jordanov, Zh. Zhekova, T. Todorov and M. Georgieva (Shumen, 2008), 67–74.
- Rashev, Rasho, Vencislav Dinchev and Boris Borisov, "Le village byzantin sur le territoire de la Bulgarie contemporaine," in *Les villages dans l'Empire byzantin, IV<sup>e</sup>–XV<sup>e</sup> siècle*, eds. J. Lefort, C. Morrisson, and J.-P. Sodini (Paris, 2005), 351–62.
- Redman, Charles L. and Ann P. Kinzig, "Resilience of past landscapes: resilience theory, society, and the *longue durée*," *Conservation Ecology* 7, no. 1 (2003), 14, available at <https://www.ecologyandsociety.org/vol7/iss1/art14/> (visit of August 20, 2020).
- Renfrew, Colin, "Trade as action at a distance: questions of integration and communication," in *Ancient Civilization and Trade*, eds. J.A. Sabloff and C.C. Lamberg-Karlovsky (Albuquerque, 1975), 3–59.
- Renfrew, Colin, "Alternative models for exchange and spatial distribution," in *Exchange Systems in Prehistory*, eds. T.K. Earle and J.E. Ericson (New York, 1977), 71–90.
- Repnikov, N.I., "Nekotorye mogil'niki oblasti krymskikh gotov," *IIAK* 19 (1906), 1–80.
- Repnikov, N.I., "Nekotorye mogil'niki oblasti krymskikh gotov," *Zapiski Imperatorskago Odesskago Obshchestva Istorii i Drevnosti* 27 (1907), 101–48.
- Repnikov, N.I., "Razvedki i raskopki na iuzhnom beregu Kryma i v Baidarskoi doliny v 1907 godu," *IIAK* 30 (1909), 99–126.
- Repnikov, N.I., "Raskopki Eski-Kermenskogo mogil'nika v 1928 i 1929 gg.," *Izvestiia Gosudarstvennoi Akademii Istorii Material'noi Kul'tury imeni N. Ia. Marra* 12, nos. 1–8 (1932), 153–80.
- Revanoglou, Ekaterini M. *Geographika kai ethnographika stoicheia sto ergo tou Prokopiou Kaisareias* (Thessaloniki: Kentro Byzantinon Ereunon, 2005).

- Reynolds, Paul, "The Roman pottery from the Triconch Palace," in *Byzantine Butrint: Excavations and Surveys, 1994–99*, eds. R. Hodges, W. Bowden, and K. Lako (Oxford, 2004), 224–69.
- Reynolds, Paul, "Trade networks of the East, 3rd to 7th centuries: the view from Beirut (Lebanon) and Butrint (Albania) (fine wares, amphorae and kitchen wares)," in *LRCW3. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry. Comparison between Western and Eastern Mediterranean*, eds. S. Menchelli, S. Santoro, M. Pasquinucci, and G. Guiducci, BAR International Series 2185 (Oxford, 2010), 89–114.
- Rhé, Gyula and Nándor Fettich, *Jutas und Öskü. Zwei Gräberfelder aus der Völkerwanderungszeit in Ungarn* (Prague, 1931).
- Rivera, Alberto Trivero, Alain Gennari, Angelo Ortu, Maurizio Cecchinato, and Vitaliy Zarko, "Le emissioni enee chersonesi tra Impero Romano e Bizantino," *Quaderno di studi dell'Associazione Culturale Italia Numismatica* 10 (2015), 5–200.
- Robak, Zbigniew, "K otázke počiatkov včasnostredovekého osídlenia Bojnej," in *Bojná 2. Nové výsledky výskumov včasnostredovekých hradísk*, ed. K. Pieta and Z. Robak (Nitra, 2015), 51–62.
- Robertson Brown, Amelia, "Islands in a sea of change? Continuity and abandonment in Dark Age Corinth and Thessaloniki," *International Journal of Historical Archaeology* 14 (2010), 230–40.
- Rodinkova, Vlasta E, "Lokal'nye raznovidnosti zhenskogo metallicheskogo ubora VII v. v Podneprov'e," in *Chteniia, posviashchennye 100-letiiu deiatel'nosti Vasiliiia Alekseevicha Gorodcova v Gosudarstvennom Istoricheskom muzee. Tezisy konferencii*, ed. N.I. Shishlina (Moscow, 2003), 113–17.
- Rodinkova, Vlasta E, "Sistema zhenskogo rannesrednevekovogo ubora srednego Podneprov'ia (retrospektivnyi analiz)," in *Vostochnaia Evropa v seredine I tysiacheletiiia n. e.*, eds. I.O. Gavritukhin and A.M. Oblomskii, Ranneslavianskii mir 9 (Moscow, 2007), 358–88.
- Rodinkova, Vlasta E, "Kurilovskii klad rannesrednevekovogo vremeni," *RA*, no. 4 (2010), 78–87.
- Rodinkova, Vlasta E, "Zhenskii kostium dneprovskikh plemen v epokhu Velikogo pereseleniia narodov: sovremennoe sostoianie issledovaniia," in *Novye issledovaniia po arkheologii stran SNG i Baltii: materialy Shkoly molodykh arkheologov (Kirillov, 3–12 sentiabria 2011 g.)*, ed. V.E. Rodinkova (Moscow, 2011), 239–65.
- Rodinkova, Vlasta E, "Klady 'drevnostei antov' i arkheologicheskaia situaciia mezhdud Seimom i Pslom v konce epokhi velikogo pereseleniia narodov," in *Slaviane vostochnoi Evropy nakanune obrazovaniia drevnerusskogo gosudarstva. Materialy mezhdunarodnoi konferencii, posviashchennoi 110-letiiu so dnia rozhdeniia Ivana Ivanovicha*

- Liapushkina (1902–1968), 3–5 dekabria 2012 g., Sankt-Peterburg*, eds. O.A. Shcheglova and V.M. Goriunova (St. Petersburg, 2012), 193–97.
- Rodinkova, Vlasta E., “Novaia nakhodka vizantiiskogo srebriannogo sosuda s kleimom iz Vostochnoi Evropy,” *RA*, no. 4 (2012), 151–58.
- Rodinkova, Vlasta E., “Klady v rannesrednevekovoii istorii i kul'ture Podneprov'ia,” in *Trudy IV (XX) vs Rossiiskogo arkhelogicheskogo saezda v Kazani*, eds. A.G. Sitdikov, N.A. Makarov and A.P. Derevianko (Kazan', 2014), 391–95.
- Rodinkova, Vlasta E., “Early Slavic hoards of the Dnieper region (on the nature and the historical significance of the phenomenon),” in *Studia barbarica. Profesorowi Andrzejowi Kokowskiemu w 65. rocznik urodzin*, ed. B. Niezabitowska-Wisniewska, vol. 1 (Lublin, 2018), 670–79.
- Rodinkova, Vlasta E. and Aleksandr N. Egor'kov, “Klad ‘drevnostei antov’ iz Sudzhi-Zamost'ia: kharakteristika metalla,” *ArkhV* 23 (2017), 274–84.
- Rodinkova, Vlasta E. and I.A. Saprykina, “Plastinchatye golovnye ukrasheniia rimskogo i rannesrednevekovogo vremeni v Vostochnoi Evrope: tipologicheskii i tekhnologicheskii analiz,” in *Trudy III (XIX) Vserossiiskogo arkhelogicheskogo saezda. Velikii Novgorod-Staraiia Russa*, eds. N.A. Makarov and E.N. Nosov, vol. 2 (St. Petersburg/Moscow, 2011), 91–93.
- Rodinkova, Vlasta E., Irina A. Saprykina, and S.A. Sycheva, “Klad iz Sudzhi-Zamost'ia i problema sociokul'turnoi interpretatsii dneprovskikh rannesrednevekovykh kladov I gruppy,” *RA*, no. 2 (2018), 130–47.
- Roman, Petre and Suzana Ferche, “Cercetările de la Ipotești (jud. Olt),” *SCIVA* 29, no. 1 (1978), 73–93.
- Romanchuk, Alla I., “Novye materialy o vremeni stroitel'stva rybozasolochnykh cistern v Khersonese,” *ADSV* 9 (1973), 45–53.
- Romanchuk, Alla I., “Plan rybozasolochnykh cistern Khersonesa,” *ADSV* 14 (1977), 18–26.
- Romanchuk, Alla I., “Chersonesos in früh- und mittelbyzantinischer Zeit,” *Talanta* 32–33 (2000–2001), 131–47.
- Romanchuk, Alla I., “Das byzantinische Cherson (Chersonesos), das Meer und die Barbaren—einige historische Aspekte,” in *Zwischen Polis, Provinz und Peripherie. Beiträge zur byzantinischen Geschichte und Kultur*, eds. L.M. Hoffmann and A. Monchizadeh, Mainzer Veröffentlichungen zur Byzantinistik 7 (Wiesbaden, 2005), 75–91.
- Romanchuk, Alla I., *Studien zur Geschichte und Archäologie des byzantinischen Cherson* (Leiden/Boston, 2005).
- Romanchuk, Alla I., “K voprosu o ‘stroitel'nom bume’ v Khersonese vo vtoroi polovine VI-pervoi polovine VII v.,” in *Prof. d. i. n. Totiu Totev i stolicata Veliki Preslav*, eds. R. Rashev, S. Vitliyanov, S. Sivriev, V. Panaiotov, and G. Stoianova (Sofia, 2006), 124–33.



- Romanchuk, Alla I., "Masshtabnoe stroitel'stvo VI v. v Khersone, ili vliianie tradicii na predstavlenie ob epokhe Iustiniana I?" *PBA* 8 (2018), 21–32.
- Romanchuk, Alla I. and Andrei V. Sazanov, *Krasnolakovaia keramika rannevizantiiskogo Khersona* (Sverdlovsk, 1991).
- Romanescu, Gheorghe. "Geoarchaeology of the ancient and medieval Danube Delta: modeling environmental and historical changes. A review," *Quaternary International* 293 (2013), 231–44.
- Rosetti, Dinu V., "Siedlungen der Kaiserzeit und der Völkerwanderungszeit bei Bukarest," *Germania* 18 (1934), 206–13.
- Rosner, Gyula, "A Szekszárd-Bogyiszlói úti avar temető ló-és lovastemetkezései," *BBAME* 6–7 (1975–1976), 79–109.
- Rosner, Gyula, "Avar kerámiaközpont Szekszárd környékén," *BBAME* 8–9 (1977–1978), 97–108.
- Rosner, Gyula, "Fazekas kemencék a Szekszárd-Bogyiszlói úti avar faluban," in *Iparrégészeti kutatások Magyarországon. Égetekemencék régészeti és interdiszplináris kutatása*, ed. J. Gömöri (Veszprém, 1981), 43–49.
- Rosner, Gyula, "Avar kerámiaműhelyek Szekszárd környéken," *Élet és Tudomány* 37 (1982), 370–72.
- Rosner, Gyula, "Die stempelerzierte Keramik der Awarenzeit in Pannonien," *AGNBFR* (1987), 125–27.
- Rosner, Gyula, "Keramikherstellung und Handel im Karpatenbecken in der frühen Awarenzeit," *WMME* 15 (1990), 125–30.
- Rosner, Gyula, "Avarische Keramik- und Siedlungsgeschichte im Karpatenbecken," in *L'art des invasions en Hongrie et en Wallonie. Actes du colloque tenu au Musée royal de Mariemont du 9 au 11 avril 1979*, ed. G. Donnay (Le Musée, 1991), 139–50.
- Rotea, Mihai, Monica Tecar, Szabolcs Nagy, Paul Pupeză, Tiberiu Tecar, and Luminița Săsăran, "Florești—Polus Center. Preliminary observations," *AMN* 43–44 (2006–2007), 47–88.
- Roth, Helmut, *Kunst und Handwerk im frühen Mittelalter. Archäologische Zeugnisse von Childerich I. bis zu Karl dem Grossen* (Stuttgart, 1986).
- Rowley-Conwy, P., "Slash and burn in the temperate European Neolithic," in *Farming Practice in British Prehistory*, ed. R. Mercer (Edinburgh, 1981), 85–96.
- Rozanova, L.S. and N.N. Terekhova, "Kharakteristika tekhniki zhelezoobrabotki v lesnoi zone," in *Ocherki po istorii drevnei zhelezoobrabotki v Vostochnoi Evrope*, ed. N.N. Terekhova (Moscow, 1997), 120–56.
- Rozanova, L.S. and N.N. Terekhova, "Kul'turnye kontakty azelinskikh plemen (po danym arkheologicheskoi metalografii)," in *Nauchnoe nasledie A.P. Smirnova i sovremennye problemy arkheologii Volgo-Kam'ia. Materialy nauchnoi konferencii*, ed.

- I.V. Belocerkovskaia, *Trudy Gosudarstvennogo Istoricheskogo Muzeia* 122 (Moscow, 2000), 135–40.
- Rozenfel'dt, R.L., "Prikamskie finny," in *Finno-ugry i balty v epokhu srednevekov'ia*, ed. V.V. Sedov (Moscow, 1987), 116–62, 244–45, and 304–14.
- Rózsa, Zoltán, "Kora avar sír tótkomlóson," *MFMESEA* 8 (2002), 341–43.
- Różycki, Łukasz, "Nie taki barbarzyńca straszny—obraz Słowian w De Bellis autorstwa Prokopiusza," in *Gemma gemmarum. Studia dedykowane Profesor Hannie Kóćce-Krenz*, ed. A. Różański (Poznań, 2017), 379–96.
- Rudenko, Konstantin A., "Raboty pervogo otriada ekspedicii Kazanskogo universiteta v Tatarii," in *Arkheologicheskie otkrytiia Urala i Povolzh'ia*, ed. N.A. Nagovicin (Izhevsk, 1991), 72–73.
- Rudenko, Konstantin A., "Metallurgicheskoe proizvodstvo VI–VII vv. n. e. na Tetiushskom II gorodishche v Tatarstane," *Teoriia i praktika arkheologicheskikh issledovanii* (2019), 16–28.
- Rudnicki, Mirosław, "Grób grup olsztyńskiej z miejscowości Piecki, woj. warmińsko-mazurskie," *Barbaricum* 7 (2004), 265–73.
- Rudnicki, Mirosław, "Ażurowa tarczka z Kielar. Przyczynek do badań nad dalekosiężnymi powiązaniem grupy olsztyńskiej," *Światowit* 8 (2009–2010), 119–32.
- Rudnicki, Mirosław, *The Olsztyn Group in the Early Medieval Archaeology of the Baltic Region. The Cemetery at Leleszki*, East Central and Eastern Europe in the Middle Ages, 450–1450 52 (Leiden/Boston, 2018).
- Rudnicki, Mirosław, Konstantin E. Skvorcov, and Paweł Szymański, "Uwagi wstępne o kolekcji Biriukova, czyli o możliwości identyfikacji zabytków z dawnego Prussia-Museum w Królewcu," in *Ubi tribus faucibus fluenta Vistulae fluminis ebi-buntur. Jerzy Okulicz-Kozaryn in memoriam*, ed. B. Kontny, *Barbaricum* 11 (Warsaw, 2015), 585–600.
- Rummel, Philipp von, "The fading power of images: Romans, barbarians, and the use of a dichotomy in early medieval archaeology," in *Post-Roman Transitions. Christian and Barbarian Identities in the Early Medieval West*, eds. W. Pohl and G. Heydemann, *Cultural Encounters in Late Antiquity and the Middle Ages* 14 (Turnhout, 2013), 365–406.
- Rusanova, Irina P., *Slavianskie drevnosti VI–IX vv. mezhdu Dneprom i zapadnym Bugom*, Svod arkheologicheskikh istochnikov E1–25 (Moscow, 1973).
- Rusanova, Irina P. and Boris O. Timoshchuk, *Kodyn, slavianskie poseleniia V–VIII vv. na r. Prut* (Moscow, 1984).
- Rusanova, K.M., "Raboty v Komi-Permiackom okruge," in *Arkheologicheskie otkrytiia 1975 goda*, ed. B.A. Rybakov (Moscow, 1976), 202.
- Ruscu, Dan, "The revolt of Vitalian and the 'Scythian controversy'," *BZ* 101, no. 2 (2008), 773–85.

- Rusev, Nikola, "Burial rituals in the period of Late Antiquity on the territory of the province of Second Moesia," in *The Lower Danube Roman Limes (1st–6th c. AD)*, eds. L. Vagalinski, N. Sharankov and S. Torbatov (Sofia, 2012), 381–404.
- Ruslanova, Rida R., "Puti i kharakter vzaimodeistviia naseleniia lesostepnogo Priural'ia v epokhu rannego srednevekov'ia (po materialam bus Ufimsko-Bel'skogo mezhdurech'ia)," in *Etnosy i kul'tury Uralo-Povolzh'ia: istoriia i sovremennost'. Materialy VIII Vserossiiskoi nauchno-prakticheskoi konferencii molodykh uchenykh posviashchennoi 85-letiiu so dnia rozhdeniia R.G. Kuzeeva*, ed. A.T. Akhatov (Ufa, 2014), 92–95.
- Ruslanova, Rida R., "Businnye ukrasheniia nekropolei III–VIII vekov Iuzhnogo Priural'ia," in *Steklo Vostochnoi Evropy s drevnosti do nachala XX veka*, ed. P.G. Gaidukov (St. Petersburg, 2015), 127–30.
- Rustoiu, Gabriel T. and Marius Ciută, "Mormântul de călăreț avar recent descoperit la Unirea-Vereșmort (jud. Alba)," *Apulum* 45 (2008), 71–98.
- Rutkiv'ska, L.M., "O stratigrafii i khronologii drevnego poseleniia okolo s. Stecovki na r. Tiasmine," in *Rannesrednevekovye vostochnoslavianskii drevnosti*, ed. P.N. Tret'iakov (Leningrad, 1974), 22–39.
- Ruttkay, Matej, "Das völkerwanderungszeitliche Gräberfeld in Tesárske Mlyňany, Bez. Zlaté Moravce," in *Barbaren im Wandel. Beiträge zur Kultur- und Identitätsumbildung in der Völkerwanderungszeit*, ed. J. Tejral, Spisy Archeologického Ústavu AV ČR v Brně 26 (Brno, 2007), 321–38.
- Rybakov, Boris A., "Novyi Sudzhanskii klad antskogo vremeni," *KSDPI* 27 (1949), 75–84.
- Rzeszotarska-Nowakiewicz, Aleksandra, "The graves from Czerwony Dwór, Site XXI in Late Migration Period. Sudovia in the light of radiocarbon data," in *The Early Slavic Settlement in Central Europe in the Light of New Dating Evidence*, eds. M. Dulicz and S. Moździoch, *Interdisciplinary Medieval Studies* 3 (Wrocław, 2013), 73–78.
- Sádlo, Jiří and Martin Gojda, "Roztoky: pokus o geobotanickou rekonstrukcii vývoje kulturní krajiny (raný středověk-současnost)," *AR* 46 (1994), 191–204.
- Sági, Károly, "Das langobardische Gräberfeld von Vörs," *AAASH* 16 (1964), 359–408.
- Sahlins, Marshall, *Stone Age Economics* (New York, 1972).
- Salamon, Ágnés and György Duma, "Archäologische und naturwissenschaftliche Untersuchungen der frühmittelalterlichen Tongefäße aus Környe, Komitat Komorn, Ungarn," *AOAW* 119 (1983), 180–203.
- Salamon, Ágnés and György Duma, "Archäologische und naturwissenschaftliche Untersuchungen der frühmittelalterlichen Tongefäße aus Szekszárd, Palánkpuszta, Komitat Tolna, Ungarn," *AOAW* 151, no. 7 (1984), 55–75.
- Salamon, Ágnés and Károly Cs. Sebestyén, "The Szeged-Kundomb cemetery," in *Das awarische Korpus. Avar Corpus Füzetek*, ed. L. Madaras (Debrecen/Budapest, 1995), 8–108.

- Salamon, Maciej, "Germanin, czy Słowianin? W sprawie znaleziska monet Justyniana znad górnej Raby," *Sprawozdania z posiedzeń Komisji Naukowych. Polska Akademia Nauk* 46, no. 1 (2002), 14–15.
- Salamon, Maciej, "Znalezisko miliarensów Justyniana I z doliny Raby. Próba interpretacji numizmatycznej," in *Studia z dziejów antyku. Pamięci Profesora Andrzeja Kunisza*, ed. W. Kaczanowicz, Prace naukowe Uniwersytetu Śląskiego w Katowicach 2166 (Katowice, 2004), 251–71.
- Salamon, Maciej and Anna Muzyczuk, "Znalezisko brązowej monety bizantyńskiej z Beska, powiat Sanok," in *Polonia minor medii aevi. Studia ofiarowane Panu Profesorowi Andrzejowi Żakiemu w osiemdziesiątą rocznicę urodzin*, eds. Z. Woźniak and J. Garncarski (Cracow/Krosno, 2003), 181–88.
- Salamon, Maciej and Marcin Wołoszyn, "Byzantine coins from the 6th and the 7th century found in Poland and their East-Central European context," *Bulletin du cercle d'études numismatiques* 43, no. 2 (2006), 235–44.
- Salugina, N.P., "Nekotorye voprosy istorii imen'kovskikh plemen v svete dannykh tekhniko-tekhnologicheskogo analiza keramiki," in *Problemy izucheniiia arheologicheskoi keramiki. Mezhhvuzovskii sbornik nauchnykh statei*, ed. A.A. Bobrinskii (Kuibyshev, 1988), 119–44.
- Sanders, Guy D.R., "Problems in interpreting rural and urban settlement in southern Greece, AD 365–700," in *Landscapes of Change: Rural Evolutions in Late Antiquity and the Early Middle Age*, ed. N. Christie (Aldershot, 2004), 163–93.
- Sandu, Vasilica, "Cercetări arheologice în zona Lunca-Bîrzești," *CAB* 4 (1992), 163–94.
- Sandu, Vasilica, "Situl Străulești-Măicănești. Așezarea din secolele VI–VII d. Hr. Săpătura din anul 2000," *Revista de cercetări arheologice și numismatice* 2 (2016), 166–87.
- Saprykina, Irina A., "Khimicheskii sostav metalla sogdiiskikh nakhodok iz Elshinskogo klada," in *Slaviane i inye iazychi ... K iubileiu Natal'i Germanovny Nedoshivinoi*, ed. N.I. Astashova, Trudy Gosudarstvennogo istoricheskogo muzeia 198 (Moscow, 2014), 289–98.
- Saprykina, Irina A., "Sostav metalla izdelii iz Kurilovskogo klada rannesrednevekovogo vremeni (po rezul'tatam rentgenfluorescentnogo analiza)," *KSIIA* 233 (2014), 178–86.
- Saprykina, Irina A., A.V. Chugaev, L.A. Pel'gunova, Vlasta E. Rodinkova, and D.A. Stoliarova, "K probleme istochnikov postupleniia serebra na territorii Podneprov'ia v rannesrednevekovoe vremia (po materialam klada iz Sudzhi-Zamost'ia)," *Stratum+*, no. 5 (2017), 41–56.
- Sarantis, Alexander, "War and diplomacy in Pannonia and the northwest Balkans during the reign of Justinian. The Gepid threat and imperial responses," *DOP* 63 (2009), 15–40.

- Sarantis, Alexander, "The Justinianic Herules: from allied barbarians to Roman provincials," in *Neglected Barbarians*, ed. F. Curta, Studies in the Early Middle Ages 32 (Turnhout, 2010), 361–402.
- Sarantis, Alexander, "Eastern Roman management of barbarian states in the Lower-Middle Danube frontier zones, AD 332–610," in *GrenzÜbergänge. Spätromisch, frühchristlich, frühbyzantinisch als Kategorien der historisch-archäologischen Forschung an der mittleren Donau. Akten des 27. internationalen Symposiums der Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donaauraum, Ruma, 4.–7.11.2015*, eds. I. Bugarski, O. Heinrich-Tamáska, V. Ivanišević and D. Syrbe, Forschungen zu Spätantike und Mittelalter 4 (Remshalden, 2016), 41–66.
- Sarantis, Alexander, *Justinian's Balkan Wars. Campaigning, Diplomacy and Development in Illyricum, Thrace, and the Northern World A.D. 527–65*, ARCA Classical Medieval Texts, Papers and Monographs 53 (Prenton, 2016).
- Sarantis, Alexander, "Roman or barbarian? Ethnic identities and political loyalties in the Balkans according to Procopius," in *Procopius of Caesarea. Literary and Historical Interpretations*, eds. Chr. Lillington-Martin and E. Turquois (London/New York, 2018), 217–37.
- Sarantis, Alexander, "Military provisioning in the sixth-century Balkans," *JLA* 12, no. 2 (2019), 329–79.
- Sarris, Peter. *Economy and Society in the Age of Justinian* (Cambridge, 2006).
- Šavel, Irena, "Staroslovansko grobišče Popava II pri Lipovcih," in *Srednji vek. Arheološki raziskave med Jadranskim morjem in Panonsko nižino*, ed. M. Guštin (Ljubljana, 2008), 65–70.
- Savel'eva, Eleonora A., "Nachalo razlozheniia rodovoi obshchiny (IV–IX vv.)," in *Istoriia Komi ASSR s drevneishikh vremen do nashikh dnei*, ed. I.B. Berkhin (Syktyvkar, 1978), 16–21.
- Savel'eva, Eleonora A., "Khronologiiia pogrebal'nykh kompleksov Veslianskogo I mogil'nika," *KSIA* 158 (1979), 91–96.
- Savel'eva, Eleonora A., "Nachalo razlozheniia rodovoi obshchiny (IV–IX vv.)," in *Istoriia Komi ASSR s drevneishikh vremen do nashikh dnei*, ed. I.B. Berkhin (Syktyvkar, 1981), 14–18.
- Savel'eva, Eleonora A., "Evropeiskii Severo-Vostok nakanune khristianizatsii," in *Khristianizatsiia Komi kraia i ee rol' v razvitiu gosudarstvennosti i kul'tury*, ed. E.A. Savel'eva, vol. 1 (Syktyvkar, 1996), 16–27.
- Sawer, Marian, *Marxism and the Question of the Asiatic Mode of Production* (The Hague, 1977).
- Sazanov, Andrei V., "Importnaia krasnolakovaia keramika pervoi poloviny VII v. n. e. iz Khersonesa," *KSIIA* 208 (1992), 40–46.

- Sazanov, Andrei V., "Krasnolakovaia keramika severnogo Prichernomor'ia rannevizantiiskogo vremeni," *MAIET* 4 (1994), 406–33.
- Sazanov, Andrei V., "Keramicheskie komplekсы Bospora 570–580 gg.," *Drevnosti Bospora* 3 (2000a), 221–59.
- Sazanov, Andrei V., "Les ensembles clos de Chersonèse de la fin du VI<sup>e</sup>–troisième quart du VII<sup>e</sup> siècles [sic]: la chronologie de la céramique," in *Les sites archéologiques en Crimée et au Caucase durant l'Antiquité tardive et le Haut Moyen Age*, eds. M. Kazanski and V. Soupault, *Colloquia Pontica* 5 (Leiden/Boston, 2000b), 123–49.
- Sazanov, Andrei V., "K istoricheskii interpretacii kompleksov Tiritaki VI–VII vv.," in *Prichernomor'e, Krym, Rus' v istorii i kul'ture. Materialy II Sudakskoi mezhdunarodnoi nauchnoi konferencii (12–16 sentiabria 2004 g.)*, eds. N.M. Kukoval'skaia et al., vol. 2 (Kiev/Sudak, 2004), 175–82.
- Sazanov, Andrei V., "L'habitat rural de la rive occidentale du Bosphore cimmérien aux III<sup>e</sup>–VI<sup>e</sup> siècles de notre ère," in *Les villages dans l'Empire byzantin, IV<sup>e</sup>–XV<sup>e</sup> siècles*, eds. J. Lefort, C. Morrisson and J.-P. Sodini, *Réalités byzantines* 11 (Paris, 2005), 403–14.
- Sazanov, Andrei V., "Les amphores orientales d'époque proto-byzantine au nord de la Mer Noire: chronologie et typologie," in *LRCW 2. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry*, eds. M. Bonifay and J.-Chr. Trégliat, *BAR International Series* 1662 (Oxford, 2007), 803–15.
- Sazanov, Andrei V., "Cretan amphorae from the northern Black Sea region: contexts, chronology, typology," in *LRCW 4 Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry. The Mediterranean: a Market Without Frontiers*, eds. N. Poulou-Papadimitriou, E. Nodarou and V. Kilikoglou, vol. 1, *BAR International Series* 2616 (Oxford, 2014), 399–409.
- Sazanov, Andrei V., "The deposit of the end of the 6th century AD from Chersonesus (Crimea)," in *LRCW 4 Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry. The Mediterranean: a Market Without Frontiers*, eds. N. Poulou-Papadimitriou, E. Nodarou, and V. Kilikoglou, vol. 1, *BAR International Series* 2616 (Oxford, 2014), 411–23.
- Sazanov, Andrei V., "Rannevizantiiskaia keramika Severnogo Prichernomor'ia: itogi i novye problemy," in *Imperiia romeev vo vremeni i prostranstve: centr i periferiia. Tezisy dokladov XXI Vserossiiskoi nauchnoi sessii vizantinistov, Belgorod, 20–23 apreliia 2016 g.*, ed. M.V. Gracianskii and P.V. Kuzenkov (Moscow/Belgorod, 2016), 176–79.
- Sazanov, Andrei V. and Iurii M. Mogarichev, "Bospor i khazarskii kaganat v konce VII-nachale VIII vv.," in *Drevnosti Iuga Rossii. Pamiati A.G. Atavin*, ed. G.E. Afanas'ev (Moscow, 2008), 253–64.

- Sazanov, Andrei V. and S.V. Mokrousov, "Poselenie Zolotoe Vostochnoe v bukhte (Vostochnyi Krym): opyt issledovaniia stratigrafii rannevizantiiskogo vremeni," *Problemy istorii, filologii, kul'tury* 3 (1996), 88–106.
- Schauer, Christa, "Early Byzantine pottery workshops in Olympia," *Rei cretariae romanae fautorum acta* 41 (2010), 29–35.
- Schmauder, Michael, "Huns, Avars, Hungarians—reflections on the interaction between steppe empires in Southeast Europe and the Late Roman to early Byzantine empires," in *Complexity of Interaction along the Eurasian Steppe Zone in the First Millennium CE*, eds. J. Bemann and M. Schmauder, Bonn Contributions to Asian Archaeology, 7 (Bonn, 2015), 671–92.
- Schmiedehelm, Marta and Silvia Laul, "Asustusest ja etnilistest oludest Kagu-Eestis I aastatuhandel," in *Studia archaeologica in memoriam Harri Moora*, eds. M. Schmiedehelm, L. Jaanits and J. Selirand (Tallinn, 1970), 154–63.
- Schortman, Edward M., and Patricia A. Urban, "Modeling the roles of craft production in ancient political economies," *JAR* 12, no. 2 (2004), 185–226.
- Schreg, Rainer, "K voprosu izuchenii osvoeniia okrugy Mangupa i Eski-Kermena v epokhu Velikogo pereseleniia narodov i srednie veka s tochki zreniia arkheologii poseleniia i okruzhaiushchei sredey," *MAIET* 15 (2009), 174–95.
- Schreg, Rainer, Michael Herdick, and Stefan Albert, "Neue Forschungen auf der Krim," in *Die Höhensiedlungen im Bergland der Krim. Umwelt, Kulturaustausch und Transformation am Nordrand des Byzantinischen Reiches*, eds. S. Albert, F. Daim, and M. Herdick, Monographien des Römisch-Germanischen Zentralmuseums 113 (Mainz, 2013), 491–97.
- Schreiner, Peter, "Aspekte der wirtschaftlichen Beziehungen zwischen Byzanz und den Turkvölkern," *VV* 55, no. 2 (1994), 15–20.
- Schütz, Joseph, "Fredegar: Über Wenden und Slawen (*Chronicon* lib. IV cap. 48 et 68)," *Jahrbuch für fränkische Landesforschung* 52 (1992), 45–59.
- Scott, Roger, "Malalas and his contemporaries," in *Studies in John Malala*, eds. E.M. Jeffreys, B. Croke and S. Roger (Sydney, 1990), 67–85.
- Sedikova, Larissa V., "Tauric Chersonesos. Medieval city-port," in *Medieval Ports in North Aegean and the Black Sea. Links to the Maritime Routes of the East. International Symposium, Thessalonike, 4–6 December 2013. Proceedings*, ed. Ph. Karagianni (Thessaloniki, 2013), 131–37.
- Sedikova, Larissa V. and Tat'iana I. Iashaeva, "Ocherk istorii Chersonesa IV–X vv.," in *Wczesnobizantyjskie budowle sakralne Chersonesu Taurydzkiego*, eds. A.B. Biernacki, E. Iu. Klenina and S.G. Ryzhov (Poznań, 2004), 33–38.
- Sedin, Anatolii A., "Drevnee zemledelie i skotovodstvo po materialam raskopok gorodishcha Nikodimovo," in *Arkheologiya i strazhytnaia gystoryia Magyleushchyny y*

- sumezhnykh terytoryi (Materiyaly konferencyi 22 krasavyka 1993 g.)*, ed. A.A. Sedin (Magileu, 1994), 114–27.
- Sedin, Anatolii A., “Gorodishche Nikodimovo (Nikadzimava),” *SlAnt* 36 (1995), 159–64.
- Sedin, Anatolii A., “Nikodimovskoe gorodishche rannego srednevekov’ia v vostochnoi Belorussii,” in *Etnogenez i etnokul’turnye kontakty slavian*, ed. V.V. Sedov (Moscow, 1997), 279–89.
- Sedin, Anatolii A., “Nikodimovo—gorodishche tret’ei chetverti I-go tysiacheletia n.e. v vostochnoi Belarusi,” in *Krai. Dyalog na sumezhzhyy kul’tur* (Magileu, 2000), 31–43.
- Sedov, Valentin V., *Dlinnye kurgany krivichei*, Arkheologiya SSSR E1–8 (Moscow, 1974).
- Sedov, Valentin V., *Slaviane v ranem srednevekov’e* (Moscow, 1995).
- Selirand, Jüri and Kaupo Deemant, “Völkerwanderungszeitliche Gegenstände mit ostskandinavischen Ornament von Proosa/Nordestland,” *Fornvännen* 80, no. 4 (1985), 243–52.
- Semenov, A.I., “Vizantiiskie monety Kelegeiskogo kompleksa,” *ASGE* 31 (1991), 121–30.
- Semenov, V.A., “Petropavlovskii mogil’nik VI–VIII vv. v iuzhnoi Udmurtii,” *VAU* 7 (1967), 164–71.
- Semenov, V.A., “Varninskii mogil’nik,” in *Novyi pamiatnik polomskoi kul’tury*, ed. V.F. Gening (Izhevsk, 1980), 5–135.
- Semykin, Iurii A., “O metallurgicheskikh gornakh imen’kovskoi kul’tury,” in *Kul’tury Vostochnoi Evropy I tysiacheletia. Mezhdunarodnyi sbornik statei*, eds. G.I. Matveeva and P.S. Kabytov (Kuibyshev, 1993), 131–36.
- Semykin, Iurii A., “Materialy k istorii metallurgii zheleza epokhi srednevekov’ia srednego Povolzh’ia,” in *Kul’tury evraziiskikh stepei vtoroi poloviny I tysiacheletia n.e. (voprosy khronologii). Materialy II Mezhdunarodnoi arkheologicheskoi konferentsii, 17–20 noiabria 1997 g.*, eds. D.A. Stashenkov, A.F. Kochkina and L.V. Kuznecova (Samara, 1998), 167–84.
- Shablavina, Ekaterina A., “Vizual’no opredeliaemye osobennosti lit’ia metallicheskh ukrashenii po voskovoi modeli (na materiale pal’chatykh fibul Dneprovskogo Levoberezh’ia VII v. n. e.),” in *Drevnie remeslenniki Priural’ia. Materialy Vserossiiskoi nauchnoi konferentsii, Izhevsk, 21–23 noiabria 2000 g.*, ed. V.I. Zav’ialov (Izhevsk, 2001), 308–21.
- Shablavina, Ekaterina A., “Tekhnika izgotovleniia serebrianykh poiasnykh naborov Gaponovskogo klada,” in *Iuvelirnoe iskusstvo i material’naia kul’tura*, ed. N. Zakharova (St. Petersburg, 2002), 186–89.
- Shablavina, Ekaterina A., “Pal’chataia fibula iz kollektsii E.A. Goriunova,” in *Kul’turnye transformatsii i vzaimovlianiia v Dneprovskom regione na iskhode rimskogo vremeni i v ranem Srednevekov’e. Doklady nauchnoi konferentsii, posviashchennoi 60-letiiu so dnia rozhdeniia E.A. Goriunova (Sankt-Peterburg, 14–17 noiabria 2000 g.)*, eds.



- V.M. Goriunova and O.A. Shcheglova, *Trudy Instituta istorii material'noi kul'tury* 11 (St. Petersburg, 2004), 244–53.
- Shablavina, Ekaterina A., “Shablony dlia lit'ia orlinogolovykh priazhek iz iuzhnokrymskikh mogil'nikov,” *ASGE* 37 (2005), 109–15.
- Shablavina, Ekaterina A., “Produkciiia odnoi Bosporskoii iuvelirnoi masterskoii vtoroi poloviny VI v.,” *RA*, no. 3 (2007), 92–102.
- Shadyra, Vadim I., “Materyial'naia kul'tura arkhealogichnaga kompleksu na vozery Seliava u Dniaprouska-Dzvinskim mizhrechchy: I–VIII stst. n. e.,” in *Slaviane na territorii Belarusi v gosudarstvennyi period. K 90-letiiu so dnia rozhdeniia doktora istoricheskikh nauk, professora Leonida Davydovicha Pobolia*, ed. A.A. Kovalenia, vol. 2 (Minsk, 2016), 197–255 and 403.
- Shamsutdinov, M.R., E.V. Ruslanov, A.A. Romanov, and R. Sh. Tagirova. “*Gorodishche Ufa-II*.” *Materialy arkheologicheskikh raskopok 2014 goda* (Ufa, 2015).
- Shandrovskaiia, Valentina S., “Tamozhennaia sluzhba v Sugdee VII–X vv.,” in *Vizantiia i srednevekovi Krym*, eds. S.P. Karpov and Iu. M. Mogarichev (Simferopol, 1995), 119–23.
- Shandrovskaiia, Valentina S., “Tamozhnaia sluzhba v Mesemvrii (po dannym sfragistike),” *Bulgaria pontica medii aevi* 4–5, no. 2 (2006), 31–42.
- Shaw, Brent D., “After Rome. Transformations of the early Mediterranean world,” *New Left Review* 51 (2008), 89–114.
- Shcheglova, Ol'ga A., “O dvukh gruppakh ‘drevnostei antov’ v srednem Podneprov'e,” *Materialy i issledovaniia po arkheologii Dneprovskogo Levoberezh'ia* (1990), 162–204.
- Shcheglova, Ol'ga A., “Veshchi dunaiskogo proiskhozhdeniia v pozdnykh kladakh ‘drevnostei antov,’” in *Istoriko-arkheologicheskii seminar “Chernigov i ego okrug a v IX–XIII vv.” (15–18 mai 1988). Tezisy dokladov* (Chernihiv, 1990), 164–68.
- Shcheglova, Ol'ga A., “Zhenskii ubor iz kladov ‘drevnostei antov’: gotskoe vliianie ili gotskoe nasledie?” *Stratum+*, no. 5 (1999), 287–312.
- Shcheglova, Ol'ga A., “O nekotorykh vozmozhnostiakh rekonstrukcii zhenskoi odezhdy po materialam naborov ukrasheniia iz kladov ‘drevnostei antov’: istochniki, analogi, rezul'taty,” in *Kul'tury stepei Evrazii vtoroi poloviny I tysiacheletia n.e. (iz istorii kosti-uma). Tezisy dokladov III Mezhdunarodnoi arkheologicheskoi konferencii 14–18 marta 2000 g.*, ed. D.A. Stashenkov (Samara, 2000), 136–41.
- Shcheglova, Ol'ga A., “K voprosu o meste i vremeni formirovaniia tradicii izgotovleniia svincovo-oloviannykh ukrasheniia v formochkakh ‘tipa Kamno-Ryuge,’” in *Migracii i osedlost' ot Dunaia do Ladogi v I tysiacheletii khristianskoii ery. Ptaiye chteniia pamiati Anny Machinskoi. Staraia Ladoga, 21–22 dekabria 2000. Materialy k chteniiam*, eds. D.A. Machinskii and A.A. Selin (St. Petersburg, 2001), 46–55.
- Shcheglova, Ol'ga A., “Klad iuvelira v Trubchevske i ‘master Gaponovskogo klada,’” in *Arkheologicheskoe izuchenie Central'noi Rossii*, ed. A.N. Bessudnov (Lipeck, 2006), 272–73.

- Shcheglova, Ol'ga A., "Mastera bez masterskikh (k rekonstrukcii organizacii iuvelirnogo dela v rannesrednevekovykh slavianskikh kul'turakh Vostochnoi Evropy)," in *Proizvodstvennye centry, istochniki, "dorogi", areal rasprostraneniia. Materialy tematicheskoi nauchnoi konferencii, St. Peterburg, 18–21 dekabria 2006 g.*, ed. D.G. Savinov (St. Petersburg, 2006), 98–104.
- Shcheglova, Ol'ga A., "Kompleks iuvelira iz Bernashevki na Dnestre i 'antskie' klady Dneprovskogo Levoberezh'ia," in *Vostochnoslavianskii mir Dnepro-Donnskogo mezhdurech'ia i kochevniki iuzhnorusskikh stepei v epokhu rannego srednevekov'ia (Materialy nauchnoy konferencii)*, ed. A.Z. Vinnikov (Voronezh, 2008), 35–40.
- Shcheglova, Ol'ga A., "Novye nakhodki 'drevnostei antov' na Brianshchine," in *Desnianskie drevnosti. Materialy mezhdgosudarstvennoi nauchnyy konferencii "Istoriia i arkheologiiia Podesen'ia", posviashchennoi pamiatii brianskogo arkheologa i kraevedy, Zasluzhennogo rabotnika kul'tury RSFSR Fedora Mikhailovicha Zaverniaeva (28.II.1919–18.VI.1994)*, eds. V.P. Alekseev, V.V. Krashennnikov, and A.A. Chubur (Briansk, 2008), 104–14.
- Shcheglova, Ol'ga A., "Volny rasprostraneniia veshchei iz Podunav'ia na Severo-Vostok v VI–VIII vv. kak otrazhenie migracii ili kul'turnykh vliianii," in *Slozhenie russkoi gosudarstvennosti v kontekste rannesrednevekovoi istorii Starogo Sveta. Materialy mezhdunarodnoi konferencii, sostoiavsheisia 14–18 maia 2007 goda v Gosudarstvennoi Ermitazhe*, eds. D.A. Machinskii and T.B. Senichenkova, *Trudy Gosudarstvennogo Ermitazha* 49 (St. Petersburg, 2009), 39–65, 545–46, and 630.
- Shcheglova, Ol'ga A., "Taina 'pliashushchikh chelovechkov' i 'sledy nevidannykh zveri'. Antropo- i zoomorfnye izobrazheniia v ranneslavianskoi metalloplastike," in *Slaviano-russkoe iuvelirnoe delo i ego istoki. Materialy Mezhdunarodnoi nauchnoi konferencii posviashchennoi 100-letiiu so dnia rozhdeniia Gali Fedorovny Korzukhinoi. Sankt-Peterburg, 10–16 aprelia 2006 g.*, eds. A.A. Peskova, O.A. Shcheglova and A.E. Musin (St. Petersburg, 2010), 146–71 and 593–94.
- Shcheglova, Ol'ga A. and A.N. Egor'kov, "Liteinye formochki iz Bernashovki i svincovo-oloviannye ukrasheniia rannesrednevekovykh kladov Dneprovskogo levoberezh'ia," in *Seminar "Iuvelirnoe iskusstvo i material'naia kul'tura". Tezisy dokladov uchastnikov sed'mogo kollokviuma, 8–14 aprelia 1999 goda* (St. Petersburg, 2000), 110–12.
- Shchepinskii, A.A., "Srednevekovye pogrebeniia v gruntovykh mogilakh bliz Simferopol'ia," in *Arkheologicheskoe issledovaniia srednevekovogo Kryma*, ed. O.I. Dombrovskiy (Kiev, 1968), 169–80.
- Shear, T. Leslie, "The Athenian Agora: excavations of 1972," *Hesperia* 42 (1973), 359–407.
- Shestakov, S.P., "Papa Martin' I v Kherson," in *Trudy XIII Arkheologicheskago saezda v Ekaterinoslav, 1905*, ed. P.S. Uvarova, vol. 2 (Moscow, 1908), 136–44.
- Shevchenko, Iurii Iu., *V zone slavianskogo etnogeneza. Paleodemoekologiiia Nizovii Desny v pervom tysiacheletii nashei ery* (St. Petersburg, 2002).

- Shevchenko, Iurii Iu., "Chelovek-okruzhaiushchaia sreda v istoricheskom proshlom (vozmozhnosti interpretatsii arkhelogicheskikh dannyykh)," in *Drevnosti Podvin'ia: istoricheskii aspekt. Po materialam kruglogo stola, posviashchennogo pamiat' A.M. Mikliaeva (6–8 oktiabria 1999)*, eds. G.V. Vilinbakhov, B.S. Korotkevich, A.N. Mazurkevich and Iu. Iu. Piotrovskii (St. Petersburg, 2003), 244–57.
- Shevchenko, Iurii Iu., "Ekologicheskii krizis V–VII vv. i final 'kul'tury rechnyykh dolin' (na primere pogranih'ia lesa i lesostepi Dneprovskogo Levoberezh'ia)," in *Priroda i civilizatsiia. Reki i kul'tury. Materialy konferentsii. Posviashchaetsia 100-letiiu vykhoda v svet pervogo russkogo izdaniia knigi vydaiushchegosia uchenogo L.I. Mechnikova "Civilizatsiia i velikie istoricheskie reki"*, eds. V.I. D'iachenko and L.R. Pavlinskaia (St. Petersburg, 1997), 213–19.
- Shimada, Izumi, "Introduction," in *Craft Production in Complex Societies. Multicraft and Producer Perspectives*, ed. I. Shimada (Salt Lake City, 2007), 1–21.
- Shitov, V.N., "Starokadomskii mogil'nik," in *Materialy po arkhologii Mordovii*, ed. M.F. Zhiganov, Trudy Nauchno-issledovatel'skogo instituta iazyka, literatury, istorii i ekonomiki 45 (Saransk, 1988), 23–70.
- Shitov, V.N., "Raboty Shokshinskoi ekspeditsii v 1991–1992 gg.," in *Arkheologicheskie otkrytiia Urala i Povolzh'ia. Sbornik statei*, ed. V.V. Nikitin (Ioshkar-Ola, 1994), 162–64 and 175.
- Shitov, V.N., "Mech s kol'cevyim navershiem iz Shokshinskogo mogil'nika," in *Povolzh'e i soprodel'nye territorii v srednie veka*, eds. V.L. Egorov and Iu. A. Zeleneev, Trudy Gosudarstvennogo istoricheskogo muzeia 135 (Moscow, 2002), 171–76.
- Shitov, M.V., T.A. Konstantinova, I.G. Loskutov, E.S. Pleshivceva, I.V. Sumareva, I.G. Chukhina, and Ol'ga A. Shcheglova, "Gorodskaia sreda, zemlepol'zovanie i sel'skoe khoziaistvo v srednevekovoii Ladoge i ee okruge (po palinologicheskim i karpologicheskim dannym). II: seredina I tys. ot R. Kh.-seredina IX v.," *Vestnik Sankt-Peterburgskogo Universiteta*, no. 3 (2007), 44–59.
- Shkodra, Brikena, "Ceramica e commercio a Durrës: evidenza preliminare dai contesti del VI secolo nel Macellum-Forum," *Quaderni friulani di archaeologia* 15 (2005), 131–55.
- Shkodra-Rrugia, Brikena, "African red slip ware: a case study from 5th to 6th century Durrës," *Rei cretariae romanae fautorum acta* 40 (2008), 19–27.
- Shkorpil, Ladislav, "Otchet' o raskopakh v' g. Kerch i odrestnostiakh v' 1909 g.," *IIAK* 47 (1913), 1–41.
- Shmidt, Evgenii A., "O kul'ture gorodishch-ubezhishch levoberezhnoi Smolenshchiny," in *Drevnie slaviane i ikh sosedi*, eds. Iu. V. Kukharenko and P.N. Tret'iakov, Materialy i issledovaniia po arkhologii SSSR 176 (Moscow, 1970), 63–69.
- Shmidt, Evgenii A., "Nekotorye dannye o zemledelii i skotovodstve na territorii Smolenskoii oblasti vo vtoroi polovine I tysiacheletii n. e.," in *Voprosy agrarnoi*

- istorii Centra i Severo-zapada RSFSR. Materialy mezhvuzovskoi nauchnoi konferencii, 14–16 ianvaria 1970 g.*, ed. A.A. Kondrashenkov (Smolensk, 1972), 64–78.
- Shmidt, Evgenii A., “O zemledelii v verkhov’iakh Dnepra vo vtoroi polovine I tys. n. e.,” in *Drevnie slaviane i Kievskaiia Rus’. Sbornik nauchnykh trudov*, ed. P.P. Tolochko (Kiev, 1989), 70–74.
- Shmidt, Evgenii A., “Vooruzhenie i snariazhenie voinov-vsadnikov tushemlinskikh plemen Podneprov’ia,” *HAZ* 6 (1995), 105–17.
- Shmidt, Evgenii A., *Zaozer’e. Arkheologicheskii kompleks IV–XII vekov* (Smolensk, 2008).
- Shmidt, Evgenii A. and F.E. Modestov, *Verkhnee Podneprov’e i Podvin’e v III–VII vv. n. e. Tushemlinskaia kul’tura* (Smolensk, 2003).
- Shovkopliias, A.M., “Keramicheskie komplekсы s gory Kiselevki v Kieve,” *KSIAU* 7 (1957), 100–03.
- Shovkopliias, A.M., “Ranneslavianskaia keramika s gory Kiselevki v Kieve,” in *Slaviane nakanune obrazovaniia Kievskoi Rusi*, ed. B.A. Rybakov, *Materialy i issledovaniia po arkheologii SSSR* 108 (Moscow, 1963), 138–44.
- Shovkopliias, A.M. and Igor O. Gavritukhin, “Komplekсы Prazhskoi kul’tury s Oboloni i nekotorye problemy izucheniia pamiatnikov tipa Korchak,” *KSIA* 208 (1993), 52–62.
- Shramko, B.A., “Rann’oseredn’ovichne poselennia v Bil’sku,” *Arkheolohiia* 35 (1980), 75–79.
- Shtereva, Irina, “Amfori ot rannovizantiiskiiia grad Coida,” in *Laurea. In honorem Margaritae Vaklinova*, eds. B. Petrunova, A. Aladzhov, and E. Vasileva, vol. 1 (Sofia, 2009), 83–88.
- Shuvalov, Petr V., “Urbikii i ‘Strategikon’ Psevdo-Mavrikiia (chast’ 1),” *VV* 61 (2002), 71–87.
- Shuvalov, Petr V., “Urbikii i ‘Strategikon’ Psevdo-Mavrikiia (chast’ 2),” *VV* 64 (2005), 34–60.
- Shuvalov, Petr V., “Slaviane Psevdo-Mavrikiia.” in *Evropeiskaia Sarmatiia. Sbornik, posviashchennnyi Marku Borisovichu Shchukinu. Po materialam konferencii, provedennoi v ramkakh XIV chtenii pamiati Army Machinskoi, Staraiia Ladoga, 26–27 dekabria 2009 g.*, ed. D.A. Machinskii (St. Petersburg, 2011), 321–31.
- Shvec, H.I., *Mnogovekovaia izmenchivost’ stoka Dnepra* (Leningrad, 1978).
- Sidorenko, Valerii A., “Issledovanie sklonov gory Mangup,” in *Arkheologicheskie otkrytiia 1982 goda*, ed. B.A. Rybakov (Moscow, 1984), 328–30.
- Sidorenko, Valerii A., “The copper coinage of Byzantine Bosphorus (ca. 590–659),” in *Kiev-Cherson-Constantinople. Ukrainian Papers at the XXth International Congress of Byzantine Studies (Paris, 19–25 August 2001)*, eds. A.I. Aibabin and G. Iu. Ivakin, *Occasional Monographs* 1 (Kiev/Simferopol/Paris, 2007), 77–120.

- Sidorov, V.N. and Petr N. Starostin, "Ostatki rannesrednevekovykh liteinykh masterskikh Shcherbetskogo poseleniia," *SA*, no. 4 (1970), 233–37.
- Sikorski, Andrzej, "Problem badań ceramiki typu Dziedzice w świetle badań w Dębczynnie, woj. Koszalin," *FPP* 2 (1987), 279–94.
- Šiljeg, Bartul, "Arheološko istraživanje lokaliteta Mala luka i Baška na Krku 2007," *Annales Instituti Archaeologici* 4, no. 1 (2009), 84–7.
- Šimėnas, Valdemaras, "Boevye nozhi-kinzhaly v Baltiiskom areale v V–VI vv.," *AIPZZ* (1991), 96–100.
- Simniškytė, Andra, "Geriamieji ragai Lietuvoje," *LA* 15 (1998), 185–245.
- Simniškytė, Andra, "Sėlos kraštas VI/VII–XIII/XIV amžiais—teritorinė struktūra ir hierarchia," *LA* 27 (2005), 29–48.
- Simniškytė, Andra, *Geležies amžius Sėloje* (Vilnius, 2013).
- Simniškytė, Andra, Miglė Stančikaitė, and Dalia Kisieliėnė, "Continuity and discontinuity in the Juodonys archaeological complex," in *Arheoloogiga Läänemeremaades. Uurimusi Jüri Seliranna auks*, eds. V. Lang and J. Tamla, Muinasa teadus 13 (Tallinn/Tartu, 2003), 267–86.
- Simoni, Katica, "Knin-Greblje. Kataloški opis grobova i nalaza," *SP* 19 (1989), 75–119.
- Simonyi, Erika, "Gepida temető Mezőkeresztes-Cethalom," in *A népvándorlásokor fiatal kutatói 8. találkozójának előadásai (Veszprém, 1997. november 28–30)*, ed. Á.S. Perémi (Veszprém, 2000), 72–86.
- Sinicyn, I.V., "Arkheologicheskie issledovaniia Zavolzhskogo otriada (1951–1953 gg.)," in *Drevnosti nizhnego Povolzh'ia. Itogi rabot Stalingradskoi arkheologicheskoi ekspedicii*, eds. E.I. Krupnov and K.F. Smirnov, Materialy i issledovaniia po arkheologii SSSR 60 (Moscow, 1959), 39–168.
- Sinicyna, G.V. and Inna V. Islanova, "Rannesrednevekove materialy s severnogo berega oz. Volgo v Tverskoi oblasti," *TAS* 7 (2009), 484–95.
- Skarbovenko, V.A., "Pogrebenie rannesrednevekovogo vremeni v Kuibyshevskom Zavolzh'e," in *Drevniaia istoriia Povolzh'ia. Nauchnye trudy*, eds. G. Basin et al. (Kuibyshev, 1979), 164–74.
- Skarbovenko, V.A. and Nikolai A. Lifanov, "Pogrebal'no-pominal'nye komplekсы rannesrednevekovykh kochevnikov iz Vostochnogo Priazov'ia (po materialam raspokopok mogil'nikov Lebedi IV i Lebedi VIII v 1980 g.)," *MAIASK* 4 (2012), 22–46.
- Skarbovenko, V.A. and Dmitrii A. Stashenkov, "Berezovskii kurgan i ego mesto v sisteme rannesrednevekovykh drevnostei Samarskogo Povolzh'ia," *Vostochnoevropeiskii arkheologicheskii zhurnal* 1 (2001), 8, available online at [http://archaeology.kiev.ua/journal/010101/skarbovenko\\_stashenkov.htm](http://archaeology.kiev.ua/journal/010101/skarbovenko_stashenkov.htm) (visit of August 24, 2020).
- Škegro, Ante, "Papal possessions in the eastern Adriatic," *AV* 55 (2004), 429–38.
- Škrkulja, Jana and Hrvoje Gračanin, "*Barbaricum contra imperium*: prostor današnje jugozapadne Vojvodine između kasne antike i ranog srednjeg vijeka u sjetlu

- povijesnih i arheoloških svjedočanstava (5.–6. stoljeće),” in *Vojvodjanski prostor u kontekstu evropske istorije. Zbornik radova*, eds. V. Gavrilović and S. Boškov (Novi Sad/Bačka Palanka 2014), 7–39.
- Skriba, Péter, “Langobard települések a Balaton partján (az M7-es autópálya megelőző régészeti feltárásai 2002–2004-ben: Balatonlelle és Balatonkeresztúr),” *Tatabányai Múzeum Tudományos Füzetek* 8 (2006), 55–93.
- Skriba, Péter and András Sófalvi, “Langobard település Balatonlelle határában,” *AE* 129 (2004), 121–63.
- Skvorcov, Konstantin N., *Mogil’nik Mitino V–XIV vv. (Kaliningradskaia oblast’). Po rezul’tatam issledovanii 2008 g.*, Materialy okhrannykh arkheologicheskikh issledovanii 15.1 (Moscow, 2010).
- Skvorcov, Konstantin N., “‘The amber coast masters’: some observations on rich burials in the Sambian-Natangian culture ca. AD 500,” in *Inter Ambo Maria. Northern Barbarians from Scandinavia Towards the Black Sea*, eds. I.N. Khrapunov and F.-A. Stylegar, Cultural-historical Reports 15 (Kristiansand/Simferopol’, 2013), 352–64.
- Skvorcov, Konstantin N., “Avarskaia replika vizantiiskogo solida na Sambiiskogo poluoströve,” *MAIASK* 6 (2014), 547–58.
- Skvorcov, Konstantin N., “Horse equipment from a double grave at Šosseynoie (preliminary report),” in *The Sösdala Horsemen, and the Equestrian Elite of Fifth Century Europe*, eds. C. Fabech and U. Näsman, Jutland Archaeological Society Publications 99 (Højbjerg, 2018), 273–78.
- Skvorcov, Konstantin N. and Aleksandr N. Khokhlov, “Pogrebenie vsadnika konca V-pervoï poloviny VI v. iz mogil’nika Shosseinoie, Kaliningradskoï oblasti (predvaritel’noe soobshchenie),” *KSIIA* 232 (2014), 151–59.
- Skvorcov, Konstantin N., Nikolai A. Makarov, Aleksandr N. Khokhlov, and A.V. Engovatova, “Gruntovyi mogil’nik Aleika-7 (Kaliningradskaia oblast’, Zelenogradskii raion),” *Gorod, selishcha, mogil’niki. Materialy spasatel’nykh arkheologicheskikh issledovanii* 25 (2017), 346–53.
- Skyba, Andrii V., *Poiasni nabory slov’ian: geraldychnyy styl’* (Kiev, 2016).
- Slabe, Marijan, *Dravlje. Grobišče iz časov preseljevanja ljudstev*, Situla 16 (Ljubljana, 1975).
- Ślomska, Joanna, “Zeugnisse einer Textilproduktion aus der Siedlung in Tumiany,” in *Völkerwanderungszeitliche Siedlung von Tumiany (Daumen) im Kreise Allerstein*, ed. T. Baranowski, Vetera et nova 7 (Warsaw, 2017), 275–88.
- Smilenko, Alla T., *Hlodos’ki skarby*, Kyivs’ka knyzhovka drukarnia 5 (Kiev, 1965).
- Smilenko, Alla T., “Osile naselennia stepovogo Podniprov’ia v ranne seredn’ovichchia,” *Arkheolohiia* 22, no. 2 (1969), 161–79.
- Smilenko, Alla T., *Slov’iany ta ikh susidy v stepovomu Podniprov’i (II–XIII st.)* (Kiev, 1975).

- Smilenko, Alla T., "Die Keramik der Töpferwerkstätten von Balka kancerka im Dneprgebiet," in *Die Keramik der Saltovo-Majaki Kultur und ihrer Varianten*, ed. Cs. Bálint, *Varia Archaeologica Hungarica* 3 (Budapest, 1990), 313–25.
- Smirnov, K.F., "Kurgany bilia m. Velykogo Tokmaka," *APU* 8 (1960), 164–89.
- Smirnova, G.I., "Ranneslavianskoe poselenie u s. Nezvisko na Dnestre," *PA* 51, no. 1 (1960), 222–39.
- Šmit, Žiga, Tina Milavec, H. Fajfar, Thilo Rehren, J.W. Lankton, and Bernard Gratuze, "Analysis of glass from the post-Roman settlement Tonovcov grad (Slovenia) by PIXE-PIGE and LA-ICPMS," *Nuclear Instruments and Methods in Physics Research B* 311 (2013), 53–59.
- Smith, Carol A., "Exchange systems and the spatial distribution of elites: the organization of stratification in agrarian societies," in *Regional Analysis*, ed. C.A. Carol, vol. 2 (New York, 1976), 309–81.
- Smith, Monica L., "The role of ordinary goods in premodern exchange," *Journal of Archaeological Method and Theory* 6, no. 2 (1999), 109–35.
- Smokotina, A.V., "Keramicheskii kompleks vtoroi poloviny VI v. iz raskopok g. Bospora," *MAIET* 14 (2008), 103–44.
- Smokotina, A.V., "Keramika gruppy 'afrikanskaia krasnolakovaia' iz raskopok v Kerchi," *MAIET* 17 (2011), 328–62.
- Smokotina, A.V., "Amfory LR 1 na Bospore," *MAIET* 19 (2014), 68–87.
- Šnē, Andris, "The economy and social power in the late prehistoric chiefdoms of eastern Latvia," *ArchB* 6 (2006), 68–78.
- Snively, Carolyn S., "Intramural burial in the cities of the late antique diocese of Macedonia," in *Radovi XIII. Međunarodnog Kongresa za starokršćansku arheologiju. Split-Poreč (25.9.–1.10. 1994)*, eds. N. Cambi and E. Marin, vol. 2, *Studi di antichità Cristiana* 54 (Vatican/Split, 1998), 491–98.
- Snively, Carolyn S., "Churches and cemeteries: religion and death in early Byzantine Macedonia," in *Starokristijanskata arheologija vo Makedonija. Prilozi od nauchen sobir*, eds. B. Aleksova, K. Tomovski and C. Grozdanov (Skopje, 2003), 59–74.
- Snively, Carolyn S., "Late antique Nicopolis: an essay on city walls and their implications for urbanism," in *Nikopolis B. Praktika tou Deuterou Diethnous Symposiou gia te Nikopole (11–15 septembriou 2002)*, ed. K.L. Zachos (Preveza, 2007), 739–49.
- Sodini, Jean-Pierre, "Productions et échanges dans le monde protobyzantin (IV–VII<sup>e</sup> s.): le cas de la céramique," in *Byzanz als Raum. Zu Methoden und Inhalten der historischen Geographie des östlichen Mittelmeerraumes*, eds. K. Belke, F. Hild, J. Koder, and P. Soustal, *Veröffentlichungen der Kommission für die Tabula Imperii Byzantini* 7 (Vienna, 2000), 181–208.
- Sodini, Jean-Pierre, "The transformation of cities in Late Antiquity within the provinces of Macedonia and Epirus," in *The Transition to Late Antiquity on the Danube*

- and *Beyond*, ed. A.G. Poulter, *Proceedings of the British Academy*, 141 (Oxford, 2007), 311–36.
- Sokolova, Irina V., “Vizantiiskie pečati VI-pervoi poloviny IX v. iz Khersonesa,” *VV* 52 (1991), 201–13.
- Sokolova, Irina V., “Monety Pereshchepinskogo klada,” in *Sokrovishcha Khana Kubrata*, ed. O. Fedoseenko (St. Petersburg, 1997), 17–41.
- Somogyi, Péter, *Byzantinische Fundmünzen der Awarenzeit*, Monographien zur Frühgeschichte und Mittelalterarchäologie 5 (Innsbruck 1997).
- Somogyi, Péter, “Byzantinische Fundmünzen der Awarenzeit. Eine Bestandaufnahme, 1998–2007,” *AAC* 42–43 (2007–2008), 231–98.
- Somogyi, Péter, “New remarks on the flow of Byzantine coins in Avaria and Walachia during the second half of the seventh century,” in *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars, and Cumans*, ed. F. Curta, East Central and Eastern Europe in the Middle Ages, 450–1450 2 (Leiden/Boston, 2008), 83–149.
- Somogyi, Péter, *Byzantinische Fundmünzen der Awarenzeit in ihrem europäischen Umfeld*, Dissertationes Pannonicae, series 4. 2 (Budapest, 2014).
- Šonje, Ante, “Ostaci groblja kod sela Klističi jugozapadno od Tinjana,” *HA* 11–12 (1980–1981), 67–88.
- Sorochan, Sergei B., “O trgovno-ekonomicheskoi politike Vizantii v Tavrike VII–IX vv.,” in *Problemy arkheologii drevnego i srednevekovogo Kryma. Sbornik nauchnykh trudov*, eds. Iu. M. Mogarichev and I.N. Khrapunov (Simferopol’, 1995), 114–22.
- Sorochan, Sergei B., “Eshche raz o pis'makh papy Martina I i o polozhenii vizantiiskogo Khersona i ego klimata,” in *Bospor Kimmeriiskii i varvarkii mir v period antichnosti i srednevekov'ia. Etnicheskie proces*, ed. V.N. Zin'ko (Kerch', 2004), 342–48.
- Sorochan, Sergei B., “O dukakh vizantiiskoi Tavriki i ikh molivdovulakh,” *SS* 3 (2008), 200–16.
- Sorochan, Sergei B., *Vizantiiskii Kherson (vtoraia polovina VI–pervaia polovina X vv.). Ocherki istorii i kul'tury*, vol. 1 (Moscow, 2013).
- Sorochan, Sergei B., “Vizantiiskie voennye sily v Krymu v VI–VII vv.,” *Stratum+*, no. 6 (2014), 113–32.
- Sorochan, Sergei B., V.M. Zubar' and L.V. Marchenko, *Zhizn' i gibel' Khersonesa* (Sevastopol', 2006).
- Sós, Agnes Cs., “Frühmittelalterliche Brandbestattung mit Feinwaage in Pókaszetpetk,” *SlovArch* 26, no. 2 (1978), 423–30.
- Sotiriou, Giorgios A., “Anaskaphai Neas Anchialou,” *PAAH* 93 (1935), 52–72.
- Sotiriou, Giorgios A., “Anaskaphai en Nea Anchialo,” *PAAH* 111 (1956), 110–18.
- Souchopová, Věra, “Experimentální tavby v rekonstruovaných slovanských pecích,” in *Zkoumání výrobních objektů a technologií archeologickými metodami. Sborník ze*



- semináře, který se konal dne 12. prosince 1979 v Technickém muzeu v Brně* (Brno, 1980), 128–33.
- Soupault, Vanessa, “A propos de l’origine et de la diffusion des poignards et épées à encoches (IV<sup>e</sup>–VII<sup>e</sup> s.),” *MAIET* 5 (1996), 60–76 and 486–92.
- Spahiu, Hëna, “Gërmimet e vitit 1961 në varrezën e herëshme mesjetare të Kalasë së Dalmaces,” *Studime Historike* 1, no. 3 (1964), 71–96.
- Spahiu, Hëna, “Gjetje të vjetra nga varreza mesjetare e Kalasë së Dalmaces,” *Iliria* 1 (1971), 227–61.
- Spahiu, Hëna, “La ville haute-médiévale albanaise de Shurdhah (Sarda),” *Iliria* 5 (1976), 151–67.
- Spahiu, Hëna, “Varreza arbërore e Kalasë së Dalmacës (Gërmime të vitit 1961),” *Iliria* 9–10 (1979–1980), 23–46.
- Spahiu, Hëna, “Bagues aux inscriptions byzantines à Koman,” *CCARB* 40 (1993), 435–46.
- Spahiu, Hëna and Damian Komata, “Shurdhahu-Sarda qytet i fortifikuar mesjetar Shqiptar (Rezultatet e gërmimeve të viteve 1967–1970),” *Iliria* 3 (1974), 257–328.
- Špehar, Perica, “(Dis)continuity of the life in late antique Danubian fortresses in the early Middle Ages: from Belgrade to the confluence of Timok river,” in *Arheologia milenului I p. Chr. IV. Nomazi și autohtoni în milenul I p. Chr.*, ed. B. Ciupercă (Brăila, 2015), 329–50.
- Spicyn, A.A., *Drevnosti basseinov rek Oki i Kamy* (St. Petersburg, 1901).
- Spielmann, Katherine A., “Feasting, craft specialization and the ritual mode of production in small-scale societies,” *American Anthropologist* 104, no. 1 (2002), 195–207.
- Spikins, Penny, “‘The bashful and the boastful’. Prestigious leaders and social change in Mesolithic societies,” *Journal of World Prehistory* 21 (2008), 173–93.
- Sprincz, Emma, “Amber artifacts of Hungary from the Middle Bronze Age to the Hungarian conquest (from 1600 B.C. to 896 A.D.),” in *Amber in Archaeology. Proceedings of the Fourth International Conference on Amber in Archaeology, Talsi 2001*, eds. C.W. Beck, I.B. Loze, and J.M. Todd (Riga, 2003), 203–12.
- Squatriti, Paolo. “The floods of 589 and climate change at the beginning of the Middle Ages: an Italian microhistory,” *Speculum* 85 (2010), 799–826.
- Stadler, Peter, “Verbreitung und Werkstätten der awarischen Hauptriemenbeschläge mit Greifendarstellung,” in *Typen der Ethnogenese unter besonderer Berücksichtigung der Bayern*, eds. H. Friesinger and F. Daim, vol. 2, Veröffentlichungen der Kommission für Frühmittelalterforschung 13 (Vienna, 1990), 305–50.
- Stadler, Peter, “Awarische Werkstätten,” in *Reitervölker aus dem Osten. Hunnen + Awaren. Burgenländische Landesausstellung 1996. Schloß Halbturn, 26. April–31. Oktober 1996*, eds. F. Daim, K. Kaus, and P. Tomka (Eisenstadt, 1996), 349–50.
- Stadler, Peter, “Avar chronology revisited, and the question of ethnicity in the Avar qaganate,” in *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars, and*

- Cumans*, ed. F. Curta, East Central and Eastern Europe, 450–1450 2 (Leiden/Boston, 2008), 47–82.
- Stadler, Peter, Herwig Friesinger, Walter Kutschera, Alfred Priller, Peter Steier and Eva Maria Wild, “Ein Beitrag zur Absolutchronologie der Langobarden aufgrund von 14C—Datierungen und ein Versuch zur Datierung der Beraubung langobardischer Gräber,” *Archaeologia Austriaca* 27 (2003), 265–78.
- Stahl, Henri H., *Contribuții la studiul satelor devălmașe românești*, 3 vols., Biblioteca istorică 6, 7, 11 (Bucharest, 1958–1965).
- Stahl, Henri H., *Studii de sociologie istorică* (Bucharest, 1972).
- Stahl, Henri H., *Traditional Romanian Village Communities. The Transition from the Communal to the Capitalist Mode of Production in the Danube Region* (Cambridge/Paris, 1980).
- Stahl, Henri H., *Probleme confuze în istoria socială a României* (Bucharest, 1992).
- Stamati, Iurie, “Two chapters of the Sovietization of the Romanian archaeology (from the late 1940s to the mid-1950s),” *AB* 19, no. 1 (2015), 81–95.
- Stamati, Iurie, *The Slavic Dossier. Medieval Archaeology in the Soviet Republic of Moldova: Between State Propaganda and Scholarly Endeavor*, East Central and Eastern Europe in the Middle Ages, 450–1450 53 (Leiden/Boston, 2019).
- Stanc, Simina. *Relațiile omului cu lumea animală. Arheozoologia secolelor IV–X pentru zonele extracarpătice de est și de sud ale României* (Iași, 2006).
- Stanc, Simina and Luminița Bejenaru, “Resurse animale exploatare în așezări de secole 2–7 d. Hr. din zona cuprinsă între Dunăre și Marea Neagră: date aheozoologice,” *Istros* 19 (2013), 389–412.
- Stančikaitė, Miglė, Dalia Kisieliėnė, and Andra Strimaitienė, “Vegetation response to the climatic and human impact changes during the Late Glacial and Holocene: case study of the marginal area of Baltija Upland, NE Lithuania,” *Baltica* 17 (2004), 17–33.
- Stanciu, Ioan, “Așezarea slavă timpurie de la Lazuri-‘Lubi tag’, jud. Satu Mare (cercetările arheologice din anii 1977, 1993–1995). Contribuții la cunoașterea secolelor 6–7 în zona Tisei superioare,” *Studii și comunicări (Satu Mare)* 15–16 (1998–1999), 115–268.
- Stanciu, Ioan, “Die ältesten Slawen in der Gegend der oberen Theiß . Eine kurze Untersuchung der Problematik im Lichte der Daten aus dem Nordwesten Rumäniens,” in *Zbornik na počest Dariny Bialekovej*, ed. G. Fusek, *Archaeologia Slovaca Monographiae. Communicationes* 7 (Nitra, 2004), 347–56.
- Stanciu, Ioan, *Locuirea teritoriului nord-vestic al României între antichitatea târzie și perioada de început a epocii medievale timpurii (mijlocul sec. V–sec. VII timpurie)*, *Patrimonium Archaeologicum Transylvanicum* 4 (Cluj-Napoca, 2011).
- Stanciu, Ioan, “Despre rolul așa-numitelor ‘pânișoare de lut’ în mediul așezărilor slave timpurii (sec. VI–VII),” *Marmatia* 10, no. 1 (2012), 165–91.

- Stanciu, Ioan, "Câteva aspecte ale locuirii medievale timpurii în partea de nord-vest a României," in *Locuirea medievală timpurie din Transilvania și vecinătăți. Lucrările conferinței naționale "Locuirea medievală timpurie din Transilvania și vecinătăți", Lipova (jud. Arad), 27–29 octombrie 2016*, eds. F. Mărginean, I. Stanciu, and D. Băcuț Crișan, *Orbis mediaevalis* 1 (Arad, 2017), 45–82.
- Stanciu, Ioan and Tiberiu Bader, "O nouă așezare medievală timpurie din zona nord-vestică a României (Turulung—VII, jud. Satu Mare)," in *In memoriam Radu Popa. Temeiuri ale civilizației românești în context european*, eds. D. Marcu Istrate, A. Istrate, and C. Gaiu, *Biblioteca Muzeului Bistrița. Seria Historica* 7 (Cluj-Napoca, 2003), 129–49.
- Stanciu, Ioan and Neța Iercoșan, "Primele morminte din cimitirul gepid de la Carei- 'Kozárd' (jud. Satu Mare)," in *In memoriam Nicoale Chidioșan*, eds. A. Chiriac, C. Ghemis, L. Cornea and G. Moisa (Oradea, 2003), 139–60.
- Stanev, Aleksandăr, *Elementi na germanskiia fibulen kostium na iug ot Dunav. Po arkheologicheski danni ot balkanskite provincii na Iztochnata Rimska Imperiia V–VI vek* (Sofia, 2012).
- Stanev, Stanislav and Zarko Zhdrakov, "The Old Metropolitan Church in Nessebar/ Mesembria after new epigraphical 7th century evidence," *AB* 13, no. 1 (2009), 87–102.
- Stanilov, Stanislav. 'Beležhki kăm identifikaciata na săkrovishteto ot Vrap'. *PBA* 7 (2013), pp. 7–14.
- Stankevich, Ia. V., "Kurgany u derevni Polibino na reke Lovati," *KSIA* 87 (1962), 31–35.
- Stankus, Jonas, "Geležies dirbinių gamybos Lietuvoje V–VIII amžiais technologija," *LTSR* 3 (1970), 57–75.
- Stankus, Jonas, "Raskopki mogil'nika v d. Kaireneliai," in *Arkheologicheskie otkrytiia 1978 goda*, ed. B.A. Rybakov (Moscow, 1979), 461–62.
- Stankus, Jonas, "Kairėnėlių plokštėnis kapinynas," *LA* 3 (1984), 63–79.
- Stankus, Jonas, "Plinkaigailo (Kėdainių raj.) m. e. V–VI amžių kapinyno geležies dirbinių metalografinė analizė," *LTSR* 1 (1986), 51–62.
- Stankus, Jonas, "Pailgočio kapinynas," in *Iš baltų kultūros istorijos. Skiriama Adolfo Tautavičiaus 75-mečiui*, eds. V. Kazakevičius, A. Girininkas, M. Michelbertas and V. Urbanavičius (Vilnius, 2000), 149–72.
- Stare, Vida, *Kranj. Nekropola iz časa pereseljavanja ljudstev* (Ljubljana, 1980).
- Stark, Barbara L., and Christopher P. Garraty, "Detecting marketplace exchange in archaeology: a methodological review," in *Archaeological Approaches to Market Exchange in Ancient Societies*, eds. C.P. Garraty and B.L. Stark (Boulder, 2010), 33–58.
- Stark, Sören, "Central and Inner Asian parallels to a find from Kunszentmiklós-Bábonny (Kunbábonny): some thoughts on the Early Avar headdress," *Ancient Civilizations from Scythia to Siberia* 15 (2009), 287–305.

- Starostin, Petr N., *Pamiatniki imen'kovskoi kul'tury*, Arkheologiia SSSR D1–32 (Moscow, 1967).
- Starostin, Petr N., “Raboty na Troicko-Uraiskom I gorodishche v 1973 g.,” in *Drevnosti Volgo-Kam'ia*, ed. G.A. Fedorov-Davydov (Kazan, 1977), 31–41.
- Starostin, Petr N. and A.A. Chizhevskii, “Maklasheevskii V mogil'nik,” in *Drevnie pamiatniki priust'evogo Zakam'ia. Materialy Novostroechnoi ekspeditsii Ministerstva kul'tury Respubliki Tatarstan*, ed. R.M. Valeev (Kazan, 1993), 20–42.
- Stashenkov, Dmitrii A., “Ob etnokul'turnykh sviaziakh naseleniia imen'kovskoi kul'tury,” *Slavianovedenie*, no. 2 (2006), 20–30.
- Stashenkov, Dmitrii A., “Ob absolutnoi date pamiatnikov Imen'kovskoi kul'tury na Samarskoi luke,” *PV*, no. 3 (2016), 225–46.
- Staššiková-Štukovská, Danica, “K formám výmeny a hodnotny tovaru v 6. a 7. storočí na Slovensku,” *SN 10* (1989), 53–56.
- Staššiková-Štukovská, Danica and Jozef Krištín, “Analyse von Tiegeln aus frühslawischen Siedlungsobjekten in Považany,” *Archaeoslavica 2* (1993), 53–61.
- Steckner, Cornelius, “Les amphores LR 1 et LR 2 en relation avec le pressoir du complexe ecclésiastique des Thermes de Samos,” in *Recherches sur la céramique byzantine*, eds. V. Déroche and J.-M. Spieser, Bulletin de Correspondance Hellénique, Supplément 18 (Athens/Paris, 1989), 57–71.
- Stefanov, Stefan, “Novgrad. Starinni selishta,” *IAI 34* (1974), 250–311.
- Stein, Frauke, “Das Helm von Steinbrunn—ein ostgotisches Ehrengeschenk?” in *Die Langobarden. Herrschaft und Identität*, eds. W. Pohl and P. Erhard, Forschungen zur Geschichte des Mittelalters 9 (Vienna, 2005), 225–46.
- Steinacher, Roland, “The Herules: fragments of a history,” in *Neglected Barbarians*, ed. F. Curta, Studies in the Early Middle Ages 32 (Turnhout, 2010), 319–60.
- Steinacher, Roland, *Rom und die Barbaren. Völker im Alpen- und Donauraum 300–600* (Stuttgart, 2017).
- Stepanov, Cvetelin, “O lokalizacii ‘Velikoi Bolgarii’ Kubrata,” *Bulgarian Historical Review* 23, no. 2 (1995), 5–11.
- Stepanov, P.D., “Iz istorii zemledeliia v Nizhnem Povolzh'e,” *Trudy Saratovskogo oblastnogo muzeia kraevedeniia. Arkheologicheskii sbornik 1* (1956), 86–114.
- Stepanova, Elena V., “New seals from Sudak,” *SBS 6* (1999), 47–58.
- Stern, Marianne E., “Early Byzantine glass from Athens (5th–8th centuries),” in *Byzantine Small Finds in Archaeological Contexts*, eds. B. Böhlendorf-Arslan and A. Ricci, Byzas 15 (Istanbul, 2012), 49–60.
- Stîngă, Ion, “Cercetări arheologice în insula Ostrovu Mare-Portiile de Fier II-comuna Gogoșu-Mehedinți,” *Drobeta 4* (1978), 117–24.
- Stoianova, Khristina, “Glinitite sădove ot VII–IX vek ot fonda na Istoricheskiia muzei—Shumen,” *PPIK 4* (1998), 330–36.

- Stone, Glenn Davis, and Christian E. Downum, "Non-Boserupian ecology and agricultural risk: ethnic politics and land control in the arid Southwest," *American Anthropologist* 101, no. 1 (1999), 113–28.
- Straub, Péter, "6–7. századi temetőrészet Keszthely-Fenekpuszta (Erdélyi István ásatása 1976)," in *Hadak útján. A népvándorlás kor fiatal kutatóinak konferenciája*, eds. L. Bende, G. Lőrinczy and Cs. Szalontai (Szeged, 2000), 205–29.
- Strzelczyk, Jerzy, *Longobardowie. Ostatni z wielkiej wędrówki ludów V–VIII wiek* (Warsaw, 2014).
- Stubavs, Ādolfs, *Ķentes pilskalns un apmetne* (Riga, 1976).
- Studitskii, Iaroslav V. and M.N. Butyrskii, "Monety Khersona s imenami Iustina I i Iustiniana II," *VV* 59 (2000), 226–29.
- Sukhobokov, O.V., *Slaviane Dneprovskogo Levoberezh'ia (Romenskaia kultura i ee predshestvenniki)* (Kiev, 1975).
- Sümeği, Pál, Orsolya Heinrich-Tamáská, Tünde Töröcsik, Gusztav Jakab, Péter Pomázi, Péter Majkut, Gergely Dávid Páll, Gergő Persaits, and Elvira Bodor, "Reconstruction of the environmental history of Keszthely-Fenekpuszta," in *Keszthely-Fenekpuszta im Kontext spätantiker Kontinuitätsforschung zwischen Noricum und Moesia*, ed. O. Heinrich-Tamáská (Budapest/Leipzig/Keszthely/Rahden, 2011), 541–72.
- Supka, Géza, "A tépei népvándorláskori leletről," *AE* 33 (1913), 395–408 and 470–71.
- Suprunenko, Aleksandr B., "Arkheologichni sposterezheniia za dnopogliblenniam u zaplavi r. Sula naproti Luben," *Poltavs'kyi kraeznavchyi muzey. Zbirnyk naukovykh statei* 7 (2012), 131–84.
- Susi, Georgeta El, "Analiza unui eșantion faunistic din situl de la Militari-Câmpul lui Boja (secolele III, V–VI d. Chr.)," *Banatica* 26 (2016), 413–24.
- Svoboda, Bedřich, "Poklad byzantského kovotepce v Zemianském Vrbovku," *PA* 44 (1953), 33–108.
- Svoboda, Bedřich, *Čechy v době stěhování národů*, Monumenta Archaeologica 13 (Prague, 1965).
- Swan, Vivien G., "Dichin (Bulgaria): interpreting the ceramic evidence in its wider context," in *The Transition to Late Antiquity on the Danube and Beyond*, ed. A.G. Poulter, Proceedings of the British Academy 141 (Oxford, 2007), 251–80.
- Simonovich, E.A., "Gorodishche Kolochin I na Gomeľ'shchine," in *Slaviane nakanune obrazovaniia Kievskoi Rusi*, ed. B.A. Rybakov, Materialy i issledovaniia po arkheologii SSSR 108 (Moscow, 1963), 97–137.
- Simonovich, E.A., "Dva rann'oseredn'ovichnikh poselennia na Chernigivshchini," in *Slov'iano-rus'ki starozhitnosti*, ed. V.I. Bidzillia (Kiev, 1969), 87–92.
- Simonovich, E.A., "Novye otkrytiia v selishchakh Avdeevy i Vorob'evka 2 vozle g. Kurska," in *Rannesrednekovyye vostochnoslavianskie drevnosti*, ed. P.N. Tret'iakov (Leningrad, 1974), 153–58.

- Synytsia, Evgen V., "Rann'osredn'ovichni ingumatsii v areali pen'kivs'koi kul'tury," *Vita antiqua*, no. 2 (1999), 98–110.
- Syrbe, Daniel, "Reiternomaden des Schwarzmeerraums (Kutriguren und Utiguren) und byzantinische Diplomatie im 6. Jahrhundert," *AOASH* 65, no. 3 (2012), 291–316.
- Szabó, Géza, "Rejtélyes körárcok. Adatok az avar kori településszerkezethez," in *Sötét idők rejtélyei. 6–n. századi régészeti emlékek a Kárpát-medencében és környékén. A 2011-ben Békéscsabán megrendezett konferencián elhangzott előadások*, eds. A. Liska and I. Szatmári, *Tempora obscura* 3 (Békéscsaba, 2012), 63–92.
- Szábó, József J. and István Vörös, "Gepida lelőhelyek Battonya határában," *AE* 106 (1979), 218–30.
- Szádeczky-Kardoss, Samu, "Die Hauptzüge der Sozialordnung des Awarenkhanats im Zeitalter der Regesten byzantinisch-awarischen Verbindungen," *JOB* 32, no. 2 (1982), 145–54.
- Szádeczky-Kardoss, Samu, "Bemerkungen über den 'Quaestor Iustinianus exercitus'. Zur Frage der Vorstufen der Themenverfassung," in *From Late Antiquity to Early Byzantium. Proceedings of the Byzantinological Symposium in the 16th International Eirene Conference*, ed. V. Vavřínek (Prague, 1985), 61–64.
- Székely, Zoltán, "Așezări din secolele VI–IX e. n. în sud-estul Transilvaniei," *Aluta* 6–7 (1974–1975), 35–78.
- Székely, Zoltán, "Așezări din secolele VI–XI p. Ch. în bazinul Oltului superior," *SCIVA* 43, no. 2 (1992), 245–306.
- Szenzthe, Gergely, "Kulturális összeolvadás a 'középvár korban'. A Vác-Kavicsbányai temető," *Archaeologiai Értesítő* 139 (2014), 99–125.
- Szenzthe, Gergely and Béla Miklós Szőke, "Avar kor," in *A Kárpát-medence ősi kincsei*, ed. Á. Vágó (Budapest, 2016), 3–59.
- Szentspéter, József, "Gesellschaftliche Gliederung des awarenzeitlichen gemeinen Volkes von Želovce I. Die führende Schicht der Bevölkerung (Bewaffnete und umgegrütete Personen)," *AAASH* 37 (1985), 79–110.
- Szentspéter, József, "Ritual'naia posuda v avarskikh pogrebniiaxh," in *Uralo-altaistika. Arkheologüia, etnografiia, iazyk*, eds. E.I. Ubriatova (Novosibirsk, 1985), 17–23.
- Szentspéter, József, "Archäologische Studien zur Schicht der Waffenträger des Awarentums im Karpatenbecken I," *AAASH* 45 (1993a), 165–246.
- Szentspéter, József, "Az avar kori hadsereg legfelsőbb vezető rétege a régészeti források tükrében," *Tisicum* 8 (1993b), 163–80.
- Szentspéter, József, "Die oberste Führungsschicht des awarenzeitlichen Heeres im Spiegel der archäologischen Quellen," in *Actes du XII<sup>e</sup> Congrès international des sciences préhistoriques et protohistoriques, Bratislava, 1–7 septembre 1991*, ed. J. Pavuj, vol. 4 (Bratislava, 1993c), 261–70.

- Szentpéteri, József, "A Barbaricumból Pannoniába (Germán katonai segédnépek a korai Avar Kaganatús központjában)," *Archaeologia Cumanica* 2 (2009), 235–52.
- Szentpéteri, József, "Az Avar Kaganátus hatalmi központjai—a hringek," *Tisicum* 22 (2013), 169–77.
- Szentpéteri, József, "Történelmi idők lenyomata: a tépei avar fejedelmi kincs," *Catastrum* 5, no. 1 (2018), 41–52.
- Szmoniewski, Bartłomiej Szymon, "Production of early medieval ornaments made of non-ferrous metals: dies from archaeological finds in north-east Romania," *AAC* 37 (2002), 111–35.
- Szmoniewski, Bartłomiej Szymon, "Two worlds, one hoard: what do metal finds from the forest-steppe belt speak about?" in *The Other Europe in the Middle Ages. Avars, Bulgars, Khazars, and Cumans*, ed. F. Curta, East Central and Eastern Europe in the Middle Ages, 450–1450 2 (Leiden/Boston, 2008), 263–96.
- Szmoniewski, Bartłomiej Szymon, "Un moule d'orfèvre de la période romano-byzantine découvert à la cité de Tropaeum Traiani (départ. de Constanța)," *Pontica* 50 (2017), 279–306.
- Szóke, Béla Miklós, "Kora avar kori veremház Balatonmagyaród—Hídvégpusztán," *ZM* 17 (2008), 209–20.
- Szűcs, Jenő, *Vázlat Európa három történelmi régiójáról* (Budapest, 1983).
- Szűcsi, Frigyes, "A kora- és középvaskori balták és foksok," in *Hadak útján XX. Népvándorlásokról Fiala Kutatóinak XX. Összejövetelének konferenciakötete, Budapest-Szigetalom, 2010. október 28–30.*, ed. Z. Petkes (Budapest, 2012), 121–38.
- Szwed, Robert, "Dendrochronological and radiocarbon dating of early medieval settlements on sites 4 and 5 at Polwica and Skrzybnik site 8, Oława powiat," in *The Early Slavic Settlement in Central Europe in the Light of New Dating Evidence*, eds. M. Dulicz and S. Moździoch, *Interdisciplinary Medieval Studies* 3 (Wrocław, 2013), 111–32.
- Szymański, Wojciech, *Szeligi pod Płockiem na początku wczesnośredniowiecza. Zespół osadniczy z VI–VII w.* (Wrocław/Warsaw/Cracow, 1967).
- Szymański, Wojciech, "Próba weryfikacji datowania zespołu osadniczego ze starszych faz wczesnego średniowiecza w Szeligach, woj. Płockie," *APol* 32 no. 2 (1987), 349–74.
- Tabakova-Canova, Gergana, "Kásnoantichniat nekropol v mestnostta Strazhata kraj grad Pleven," *INIM* 3 (1981), 102–84.
- Takács, István, Tamás Somhegyi, and László Bartosiewicz, "Avar kori lovakról Vörs-Papkert B temető leletei alapján," *SMK* 11 (1995), 181–88.
- Talevski, Khristijan, "Defanzivnata voena politika na Justinijan I na Balkanot, vo kontekst na transformacijata na docnorimskite i ranovizantiskite naselbi," *Folia archaeologica balcanica* 3 (2015), 393–424.

- Tamla, Toomas, "Issledovaniia mogil'nikov v basseine r. Pada," in *Arkheologicheskie otkrytiia 1986 goda*, ed. V.P. Shilov (Moscow, 1988), 426.
- Tănase, Daniela, "Câteva observații cu privire la mormântul de orfevru din epocă avară descoperit la Felnac (jud. Arad)," *Analele Banatului* 12–13 (2004–2005), 237–64.
- Tănase, Daniela, "Gräber mit Goldschmiede- und Schmiedewerkzeugen aus der Awarenzeit. Zeichen der Macht oder Beweis für die Ausübung des Handwerks," in *Potestas et communitas. Interdisziplinäre Beiträge zu Wesen und Darstellung von Herrschaftsverhältnissen im Mittelalter östlich der Elbe*, eds. A. Paroń, S. Rossignol, B. Szymon Szmoniewski and G. Vercamer (Warsaw/Wrocław, 2010), 213–25.
- Tănase, Daniela, "Piese de aur din epoca migrațiilor în colecția Muzeului Banatului din Timișoara," in *Între stepă și imperiu. Studii în onoarea lui Radu Harhoiu*, eds. A. Măgureanu and E. Gáll (Bucharest, 2010), 141–47.
- Tănase, Daniela, *Prelucrarea metalelor în lumea barbară la Dunărea mijlocie și inferioară în secolele VI–VII* (Timișoara, 2010).
- Tăpkova-Zaimova, Vasilka. "Edin interesen dokument za polozhenieto na trakiiskite voinici po vremeto na Iustinian I," in *Izsledvaniia v chest na Marin S. Drinov*, eds. A. Burmov, I. Duichev and D. Angelov (Sofia, 1960), 593–96.
- Tartari, Fatos, "Një varrezë e mesjetës së hershme në Durrës," *Iliria* 14, no. 1 (1984), 227–50.
- Tautavičius, Adolfas, "Vostochnolitovskie kurgany," in *Voprosy etnicheskoj istorii narodov Pribaltiki po dannym arkheologii, etnografii i antropologii*, ed. S.A. Tarakanova and L.N. Terent'eva (Moscow, 1959), 390–95.
- Tautavičius, Adolfas, "Taurapilio 'kunigaikščio' kapas," *LA* 2 (1981), 18–42.
- Tautavičius, Adolfas, "Požerės plokštinis kapinynas," *LA* 3 (1984), 93–118.
- Tautavičius, Adolfas, *Vidurinis geležies amžius Lietuvoje (V–IX a.)* (Vilnius, 1996).
- Tavlinceva, E. Iu., "K voprosu o metallicheskom bisere v riazano-okskikh mogil'nikakh (po materialam Shokshinskogo mogil'nika)," in *Nauchnoe nasledie A.P. Smirnova i sovremennye problemy arkheologii Volgo-Kam'ia. Materialy nauchnoi konferencii*, ed. I.V. Belocerkovskaia, Trudy Gosudarstvennogo Istoricheskogo Muzeia 122 (Moscow, 2000), 109–15.
- Țeicu, Dumitru and Miograd Aralica, "Moulds in the collections of Vršac Museum (Serbia)," *Banatica* 26 (2016), 157–67.
- Tejerizo García, Carlos, "La arquitectura doméstica en las aldeas meseteñas altomedievales," in *El poblamiento rural de época visigoda en Hispania. Arqueología del campesinado en el interior peninsular*, ed. J.A. Quirós Castillo, Documentos de arqueología medieval 6 (Bilbao, 2014), 289–328.
- Tejral, Jaroslav, "Langobardische Fürstengräber nördlich der mittleren Donau," in *Glaube, Kult und Herrschaft. Phänomene des Religiösen im 1. Jahrtausend n. Chr. in Mittel- und Nordeuropa. Akten des 59. internationalen Sachsensymposiums und*



- der Grundprobleme der frühgeschichtlichen Entwicklung im Mitteldonaunraum*, eds. U. von Freeden, H. Friesinger and E. Wamers, *Kolloquien zur Vor- und Frühgeschichte* 12 (Bonn, 2009), 123–62.
- Tejral, Jaroslav, Stanislav Stuchlík, Miloš Čižmář, Zdeněk Klanica, and Soňa Klanicová. *Langobardische Gräberfelder in Mähren I.*, Spisy Archeologického Ústavu AV ČR v Brně 39 (Brno, 2011).
- Tejral, Jaroslav, “Cultural or ethnic changes? Continuity and discontinuity on the Middle Danube ca. A.D. 500,” in *The Pontic-Danubian Realm in the Period of the Great Migration*, ed. V. Ivanišević and M. Kazanski. *Monographies du Centre de recherche d’histoire et civilisation de Byzance*, 36 (Paris/Belgrade, 2012), 115–88.
- Telegin, D. Ia., “Pamiatniki Poorel’ia v rabotakh ekspedicii ‘Dnepr-Donbase’ (1970–1971 gg.),” *ALLU*, no. 2 (2001), 19–26.
- Telegin, D. Ia. and S.A. Beliaeva, “Pam’iatky rann’oslov’ians’kogo chasu na Oreli,” *Arkheolohiia* 18 (1975), 95–107.
- Tel’nov, Nikolai P. and T.F. Riaboi, “Novye dannye o ranneslavianskom poselenii u s. Gansk,” in *Arkheologicheskie issledovaniia srednevekovykh pam’iatnikov v Dnestrovsko-Prutskom mezhdurech’e*, ed. P.P. Byrnia (Kishinev, 1985), 105–17.
- Tempír, Zdeněk, “Zemědělské plodiny a plevele z archeologických nálezů v Březně u Loun,” *Vědecké práce Zemědělského Muzea* 22 (1982), 121–95.
- Tente, Catarina, “Social inequality in early medieval rural settlements: the case of central-northern Portugal in the 10th century,” in *Social Complexity in Early Medieval Rural Communities. The North-Western Iberia Archaeological Record*, ed. J.A. Quirós Castillo (Oxford, 2016), 35–46.
- Tentiuc, Ion, “Siturile din secolele V–VII de la Molești-Ialoveni (Republica Moldova),” *AM* 21 (1998), 201–12.
- Tentiuc, Ion, “Des considérations sur la présence de quelques groupes des Alans à l’ouest des Carpates Orientaux pendant le Haut Moyen Age,” in *Studia antiqua et medievalia. Miscellanea in honorem annos LXXV peragentis Professoris Dan Gh. Teodor oblata*, ed. D. Aparaschivei, *Honoraria* 5 (Bucharest, 2009), 439–54.
- Teodor, Dan Gh., *The East-Carpathian Area of Romania in the V–XI Centuries A.D.*, BAR International Series 81 (Oxford, 1980).
- Teodor, Dan Gh., *Romanitatea carpato-dunăreană și Bizanțul în veacurile V–XI* (Iași, 1981).
- Teodor, Dan Gh., *Civilizația romanică la est de Carpați în secolele V–VII (așezarea de la Botoșana-Suceava)*, *Biblioteca de arheologie* 46 (Bucharest, 1984a).
- Teodor, Dan Gh., *Continuitatea populației autohtone la est de Carpați. Așezările din secolele VI–XI e.n. de la Dodești-Vaslui* (Iași, 1984b).
- Teodor, Dan Gh., “Centres artisanaux dans les régions extra-carpatiques aux VI<sup>e</sup>–XI<sup>e</sup> siècles n. è.,” in *Actes du XII<sup>e</sup> Congrès international des sciences préhistoriques et*

- protohistoriques, Bratislava, 1–7 septembre 1991*, ed. J. Pavuj, vol. 4 (Bratislava, 1993), 232–37.
- Teodor, Dan Gh., “Ateliere pentru prelucrat obiecte de cult creștin pe teritoriul Moldovei în sec. VI–VIII,” in *Credință și cultură în Moldova. I. Trecut religios și devenire creștină*, ed. D. Ciobotea (Iași, 1995), 50–56.
- Teodor, Dan Gh., *Meșteșugurile la nordul Dunării de Jos în secolele IV–XI*, Bibliotheca Archaeologica Iassiensis 8 (Iași, 1996).
- Teodor, Dan Gh., “Contribuții la cunoașterea obștii sătești din mileniul marilor migrații,” *Carpica* 28 (1999), 103–08.
- Teodor, Dan Gh., “Tipare din secolele V–XI d. Hr. în regiunile carpato-nistriene,” *AM* 28 (2005), 159–74.
- Teodor, Dan Gh., “Ateliers byzantins des VI<sup>e</sup>–VIII<sup>e</sup> siècles au nord du Bas-Danube,” *Etudes byzantines et post-byzantines* 5 (2006), 198–201.
- Teodor, Dan Gh., *Un centru meșteșugăresc din Evul Mediu timpuriu. Cercetările arheologice de la Lozna-Botoșani*, Bibliotheca Archaeologica Moldaviae 15 (Brăila, 2011).
- Teodor, Dan Gh., *Așezarea medievală timpurie de la Suceava-Șipot*, Istorici ieșeni 4 (Iași, 2013).
- Teodor, Eugen S., “Ceramica așezărilor din secolul al VI-lea de la Dulceanca,” in *Istro-Pontica. Muzeul tulcean la a 50-a aniversare 1950–2000. Omagiu lui Simion Gavrilă la 45 de ani de activitate, 1955–2000*, eds. M. Iacob, E. Oberländer-Târnoveanu and F. Topoleanu (Tulcea, 2000), 295–302.
- Teodor, Eugen S., “Epoca romană târzie și cronologia atacurilor transdanubiene. Analiza componentelor etnice și geografice (partea întâi, de la 469 la 565),” *Muzeul Național* 14 (2002), pp. 3–35.
- Teodor, Eugen S., “Epoca romană târzie și cronologia atacurilor transdanubiene. Analiza componentelor etnice și geografice (partea a doua, de la 565 la 626),” *Muzeul Național* 15 (2003), 3–36.
- Teodor, Eugen S., “The shadow of a frontier: the Walachian Plain during the Justinianic age,” in *Borders, Barriers, and Ethnogenesis. Frontiers in Late Antiquity and the Middle Ages*, ed. F. Curta (Turnhout, 2005), 205–45.
- Teodor, Eugen S., “Handmade pottery from the Late Roman Fortress at Capidava,” in *Între stepă și imperiu. Studii în onoarea lui Radu Harhoiu*, eds. A. Măgureanu and E. Gáll (Bucharest, 2010), 211–24.
- Teodor, Silvia, “Săpăturile de la Cucorâni (jud. Botoșani),” *AM* 8 (1975), 121–201.
- Teodorescu, Victor, “O nouă cultură arheologică recent precizată în țara noastră, cultura Ipotești-Cîndești (sec. V–VII).” in *Sesiunea de comunicări științifice a muzeelor de istorie, dec. 1964*, vol. 2 (Bucharest, 1971), 104–30.
- Teodorescu, Victor, “Centre meșteșugărești din sec. V/VI–VII în București,” *BMIM* 9 (1972), 73–99.

- Teodorescu, Victor, "Les anciens Roumains," *Roumanie. Pages d'histoire* 5, no. 2 (1980), 56–91.
- Teodorescu, Victor, *Studii și cercetări arheologice în Muntenia* (Bucharest, 2009).
- Teodorescu, Victor and Marinela Peneș, "Matricea de incidență a siturilor arheologice de la Budureasca (Budureasca 1-Budureasca 31), jud. Prahova, oglindă a continuității multimilenare de viață, a unității culturale și a densității paleodemografice în zonă," *AMIAP* 1 (1984), 11–50.
- Teodorescu, Victor, Vasile I. Dupoi, Marilena Jibotean-Peneș, and Gheorghe Panait, "Budureasca, străveche și statornică vatră de civilizație la originile poporului român. Cercetările arheologice din anul 1983 privind complexele străromânești de tip Ipotești-Cândești (sec. V–VII e.n.)," *Mousaios* 5 (1999), 91–117.
- Teodorescu, Victor, Vasile I. Dupoi, Marinela Peneș, Dan Lichiardopol, and Gheorghe Panait, "Stațiunea arheologică Budureasca, jud. Prahova (complexele daco-române și străromânești)," *MCA* 17, no. 2 (1993), 365–87.
- Teploukhov, F.A., "Drevnosti Permskoi Chudi iz serebra i zolota i ee torgovye puti," in *Permskii kraï. Sbornik svedenii o Permskoi gubernii, izdavaemyi Permskim gubernskim statisticheskim komitetom*, ed. A.A. Dimitriev (Perm, 1895), 247–90.
- Terpylovs'kyi, Rostislav V. and Oleksandr V. Shekun, *Oleksandrivka 1—bagatosharove rann'oslov'ians'ke poselennia bilia Chernigova* (Chernihiv, 1996).
- Terry, Ann Bennett and Fiona Gilmore Eaves, *Retrieving the Record. A Century of Archaeology at Poreč (1847–1947)*, Studies in Early Christian and Medieval Art History and Archaeology. Dissertationes et monographiae 1 (Zagreb/Motovun, 2001).
- Testart, Alain, "Echange marchand, échange non-marchand," *Revue française de sociologie* 42, no. 4 (2001), 719–48.
- Testart, Alain, *Critique du don. Etude sur la circulation non-marchande* (Paris, 2007).
- Tettamanti, Sárolta, "Avarkori öntöminta Vácrol," *AE* 104 (1977), 79–85.
- Thompson, Margaret, *The Athenian Agora. Results of Excavations Conducted by the American School of Classical Studies at Athens* (Princeton, 1954).
- Threpsiadis, I., "Anaskaphai kai tychaia euremata Attikes, Boiotias kai Euboias," *Archaiologike ephemeris: ekdidomene tes archaiologikes hetaireias* 110 (1971), 8–38.
- Tikhanova, Mariia A., "O ranneslavianskom poselenii v Luke-Vrubleckoi," *KSI A* 125 (1971), 7–12.
- Timoshchuk, Boris O., "Social'naia sushchnost' gorodishcha Zimno," in *Ranneslavianskie mir. Materialy i issledovaniia*, eds. S.A. Pletneva and I.P. Rusanova, Ranneslavianskii mir 1 (Moscow, 1990), 151–57.
- Timoshchuk, Boris O., *Vostochnoslavianskaia obshchina VI–X vv. n. e.* (Moscow, 1990).
- Timoshchuk, Boris O., *Vostochnye slaviane. Ot obshchiny k gorodam* (Moscow, 1995).

- Timoshchuk, Boris O. and Oleg M. Prykhodniuk, "Rann'oslov'ians'ki pam'iatky VI–VII st. v seredn'omu Podnistrov'i," in *Slov'iano-rus'ki starozhitnosti*, ed. V.I. Bidzillia (Kiev, 1969), 71–79.
- Tóbiás, Bendegúz, "Die awarenzeitlichen Sieblöffel im Karpathenbecken," *CAH* (2001), 161–82.
- Tóbiás, Bendegúz, "Frühmittelalterliche Gräber mit Beigabe von Schmiedewerkzeugen," Ph.D. Dissertation, University of Vienna (Vienna, 2008).
- Tóbiás, Bendegúz, "Riemenzungen mediterraner Gürtelgarnituren mit Monogrammen. Studien zur Chronologie und Funktion," *Acta Praehistorica et Archaeologica* 43 (2011), 151–88.
- Tobolski, Kazimierz, "Dotychczasowy stan badań paleobotanicznych i biostratygraficznych Lednickiego Parku Krajobrazowego," in *Wstęp do paleoekologii Lednickiego Parku Krajobrazowego*, ed. K. Tobolski (Poznań, 1991), 11–34.
- Tolochko, Petro P., "Pamiatniki VI–VII vv. i problema voznikoveniia Kieva," in *Sborník referátů ze sympozia "Slované 6.–10. století", Břeclav-Pohansko, 1978*, eds. B. Dostál and J. Vignatiová (Brno, 1980), 245–51.
- Tolstov, S.P., "Voennaia demokratiia i problema 'geneticheskoi revolucii,'" in *Lenin i osnovnye problemy doklassovogo obshchestva*, ed. S.N. Bykovskii (Moscow, 1935), 203–15.
- Tomas, Agnieszka, "Sixth-century pottery kiln from Novae (Moesia Secunda). A contribution to the studies of the local pottery manufacturing," *AB* 19, no. 3 (2015), 63–73.
- Tomka, Péter, "Das germanische Gräberfeld aus dem 6. Jahrhundert in Fertőszentmiklós," *AAASH* 32 (1980), 5–30.
- Tomka, Péter, "Frühawarenzeitliche Hirten in der Kleinen Tiefebene," in *Ethnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis zum 11. Jahrhundert. Symposium Nitra 6. bis 10. November 1994*, eds. D. Bialeková and J. Zábojník (Bratislava, 1996), 141–50.
- Tomka, Péter, "Die awarischen Brunnen in der Kleinen Tiefebene," *Antaeus* 26 (2003), 159–77.
- Tomka, Péter, "Korai avar sírok Börcs-Nagydombon (Győr-Moson-Sopron megye)," *AE* 130 (2005), 137–78.
- Tomka, Péter, "Die Lehre der Bestattungsbräuche," *Antaeus* 29–30 (2008), 233–63.
- Toncheva, Gorana, "Keramichna rabotilnica krai s. Kranevo," *Izvestiia na arheologicheskoto druzhestvo* 9 (1952), 81–104.
- Topalilov, Ivo, "Philippopolis. The city from the 1st to the beginning of the 7th c.," in *Roman Cities in Bulgaria*, ed. R.T. Ivanov (Sofia, 2012), 2–76.
- Topoleanu, Florin and Eugen S. Teodor, "Handmade pottery from Halmyris and its cultural context," *Peuce* 7 (2009), 347–60.

- Torbatov, Sergei, "Quaestura exercitus: Moesia Secunda and Scythia under Justinian," *AB* 1, no. 3 (1997), 78–87.
- Torcellan, Michela. *Le tre necropoli altomedioevali di Pinquente*, Ricerche di archeologia altomedievale e medievale 11 (Florence, 1986).
- Tornow, Siegfried, *Was ist Osteuropa? Handbuch der osteuropäischen Text- und Sozialgeschichte von der Spätantike bis zum Nationalstaat*, Slavistische Studienbücher, 16. (Wiesbaden, 2005).
- Török, Béla, Árpád Kovács, and Zsolt Gallina, "Iron metallurgy of the Pannonian Avars of the 7th–9th century based on excavations and material examinations," in *Archaeometallurgy in Europe III. Proceedings of the 3rd International Conference, Deutsches Bergbau-Museum, Bochum, June 29–July 1, 2011*, eds. A. Hauptmann and D. Modarressi-Tehrani (Bochum, 2015), 229–38.
- Török, Béla, Árpád Kovács, and Frigyes Szücs, "Előszállás-Öregyhegy és Úrhida-Arany János utca lelőhelyeken feltárt avar kori fókások elektronmikroszkópos archeometriai anyagvizsgálata és régészeti értékelése," *Alba Regia* 44 (2016), 17–36.
- Török, Béla, Árpád Kovács, Márton Benke, and Máté Sepsi, "Szolnok-Szanda gepida temetőjéből származó három övcsat roncsolásmentes archeometallurgiai vizsgálata," *Tisicum* 26 (2018), 157–72.
- Török, Gyula, *A kiszombori germán temető helye népvándorláskori emlékeink között* (Szeged, 1936).
- Toropu, Octavian, *Romanitatea târzie și străromânii în Dacia traiană subcarpatică* (Craiova, 1976).
- Toropu, Octavian, "Noi descoperiri arheologice la Sucidava-Celei," *Arhivele Olteniei* 1 (1981), 67–75.
- Toska, Lida and Giorgios Chatzakis, "Byzantino nekrotapheio ste Balta (Kassandreia)," *AEMT* 15 (2001), 161–66.
- Toškan, Borut and Janez Dirjec, "Sesalska makrofavna," in *Poznoantična utrjena naselbina Tonovcov grad pri Kobaridu. Najdbe*, eds. Z. Modrijan and T. Milavec, Opera Instituti Archaeologici Sloveniae 24 (Ljubljana, 2011), 303–88.
- Tóth, Ágnes B., "Gepida településnyomok a Körös-Tisza-Maros közén," *MFME*, no. 2 (1984–1985), 97–104.
- Tóth, Ágnes B., "A gepidák települési képe a Tisza-Maros-Körös közén," *Acta Universitatis Szegediensis de Attila Jozsef nominatae. Acta Historica* 84 (1987), 3–9.
- Tóth, Ágnes B., "A szarvasi gepida fibula és köre. A szarvasi gepida leletek a Magyar Nemzeti Múzeum gyűjteményében," *MFME* 5 (1999), 261–77.
- Tóth, Ágnes B., "The Gepids," in *Hungarian Archaeology at the Turn of the Millennium*, ed. Zs. Visy (Budapest, 2003), 294–98.
- Tóth, Ágnes B., *Gepidische Siedlungen im Theissgebiet*, Monumenta Germanorum Archaeologica Hungariae 4 (Budapest, 2006).

- Tóth, Ágnes B., "The role of rivers in the settlement history of the Great Hungarian Plain in the 5th and 6th centuries; overview and prospects," in *Offene Landschaften*, eds. O. Heinrich-Tamáská, M. Hardt, L. Révész and W. Schenk, *Siedlungsforschung* 31 (Bonn, 2014), 191–208.
- Tóth, Ágnes B. and Enikő Sipos, "Pliszírozott női ruha a szentendrei langobard temetőben? I. A textilmaradványok vizsgálata," in "*Vadrózsából tündérsípot csináltam*." *Tanulmányok Istvánovits Eszter 60. születésnapjára*, ed. A. Szemán (Nyíregyháza, 2018), 477–90.
- Tóth, András, "Rúnafeliratos tárgyak Magyarországról. Példák a rúnajelek szakrális-mágikus használatára," in *Hadak útján XX. Népvándorlásokor Fiatalkutatóink XX. Összejövetelének konferenciakötete, Budapest-Szigetalom, 2010. október 28–30.*, ed. Zs. Petkes (Budapest, 2012), 97–108.
- Tóth, Elvira H., *A Kunbábonyi avar fejedelem* (Budapest, 1971).
- Tóth, Elvira H., "Preliminary account of the Avar princely find at Kunbábony," *Cumania* 1 (1972), 143–60.
- Tóth, Elvira H., "Nézzük meg együtt a kunbábonyi avar fejedelmi sírleleteket," *Művészet* 75, no. 6 (1975), 27–29.
- Tóth, Elvira H., "Korai avar vezető réteg családi temetője a kunbábonyi kagán szál-lásterületén," *Múzeumi kutatások Bács-Kiskun megyében* 19 (1984), 10–20.
- Tóth, Elvira H., "A kunbábonyi lelet amphorája és kapcsolatai," *Múzeumi kutatások Bács-Kiskun megyében* 21 (1986), 51–56.
- Tóth, Elvira H., "Die Familiengrabstätte einer frühawarischen führenden Schicht im Stammesgebiet des Khagans von Kunbábony," in *Trudy V Mezhdunarodnogo Kongressa arkheologov-slavistov, Kiev 18–25 sentiabria 1985 g.*, ed. V.D. Baran vol. 4 (Kiev, 1988), 212–16.
- Tóth, Elvira H., "Kunbábony—das Grab eines awarischen Khagans," in *Reitervölker aus dem Osten. Hunnen + Awaren. Burgenländische Landesausstellung 1996. Schloß Halbturn, 26. April–31. Oktober 199*, eds. F. Daim, K. Kaus, and P. Tomka (Eisenstadt, 1996), 391–404.
- Tóth, Elvira H., "Grab 70 des awarischen Gräberfeldes von Hetényegyháza-Mária út.," *AAASH* 51 (1999–2000), 393–410.
- Tóth, Elvira H. and Attila Horváth, *Kunbábony. Das Grab eines Awarenkhagans*. (Kécskemét, 1992).
- Tóth, József, "Tiszavárkony-hugyinparti avar temető anyagának restaurálása és ötvöstechnikai elemzése," *MM* 6 (1979), 191–212.
- Touchais, Gilles, "Chronique des fouilles et découvertes archéologiques en Grèce en 1981," *Bulletin de Correspondance Hellénique* 106 (1982), 529–631.
- Trajkovski, Kiril, "Ranokhristijanska grobnica vo Morodvis," *Likhnid. Godishen zbornik na Narodniot muzej vo Okhrid* 7 (1989), 89–91.

- Travlos, J. and Alison Frantz, "The church of St. Dionysios the Areopagite and the palace of the archbishop of Athens in the 16th century," *Hesperia* 34, no. 3 (1965), 157–202.
- Tret'iaikov, Petr N., "Gorodishcha-svialishcha levoberezhnoi Smolenshchiny," *SA*, no. 4 (1958), 170–86.
- Tret'iaikov, Petr N. and Evgenii A. Shmidt, *Drevnie gorodishcha Smolenshchiny* (Moscow/Leningrad, 1963).
- Trever, K.V. and V.G. Lukonin, *Sasanidskoe srebro. Sobranie Gosudarstvennogo Ermitazha. Khudozhestvennaia kul'tura Irana III–VII vekov* (Moscow, 1987).
- Trifunović, Stanko, "Naselja Limiganata i Slovena u Banatu i Bačkoj," *GSAD* 15–16 (1999–2000), 43–79.
- Trifunović, Stanko and Ivana Pašić, "Stari vinogradi' u Churugu—visheslojno arkheolosko nalazishte," *GSAD* 19 (2003), 263–90.
- Tuganaev, V.V. "Sostav kul'turny i sornykh rastenii v akrheologicheskikh materialakh gorodishcha Osh Pando bliz s. Sainino Mordovskoi ASSR (VI–IX vv. n.e.)," *Botanicheskii zhurnal* 78, no. 4 (1973), 581–82.
- Tuganaev, V.V. and T.P. Efimova, "Agroetnobotanicheskie materialy iz Verkh-Sainskogo gorodishcha Permskoi oblasti (VI–IX vv. n.e.)," in *Novye istochniki po drevnei istorii Priural'ia*, ed. R.D. Goldina (Ustinov, 1985), 27–30.
- Tuganaev, A.V. and V.V. Tuganaev, *Sostav, struktura i evoliuciia agroekosistem evropeiskoi Rossii (lesnaia i lesostepnaia zony) v srednevekov'e (VI–XVI vv. n.e.)* (Izhevsk, 2007).
- Turčan, Vladimír, "Hroby zlatníkov v 6.–7. storočí v Karpatskej kotline," *AR* 36 (1984), 481–89.
- Turova, N.P. and S.A. Chernysh, "Rannesrednevekovyi mogil'nik Aloniia na iuzhnom beregu Kryma," *MAIET* 30 (2015), 133–84.
- Tvauri, Andres, "Migrants or natives? The research history of long barrows in Russia and Estonia in the 5th–10th centuries," In *Topics on the Ethnic, Linguistic and Cultural Making of the Russian North*, ed. J. Nuorluoto, *Slavica Helsingiensia* 32 (Helsinki, 2007), 1–38.
- Tvauri, Andres, *The Migration Period, Pre-Viking Age, and Viking Age in Estonia, Estonian Archaeology* 4 (Tartu, 2012).
- Tvauri, Andres, "The impact of the climate catastrophe of 536–537 AD in Estonia and neighbouring areas," *EAA* 18, no. 1 (2014), 30–56.
- Tyszkiewicz, Lech A., "Problem zależności Słowian od Awarów w VI–VII wieku," *Balkanica Posnaniensia* 4 (1989), 95–108.
- Uenze, Syna. *Die spätantiken Befestigungen von Sadovec. Ergebnisse der deutsch-bulgarisch-österreichischen Ausgrabungen 1934–1937*, *Münchener Beiträge zur Vor- und Frühgeschichte*, 43 (Munich, 1992).
- Ugrin, Emese, *Le trésor de Zalésie*, *Publications d'histoire de l'art de l'archéologie de l'Université Catholique de Louvain* 51 (Louvain-la-Neuve, 1987).

- Ujčić, Željko, "Zaštitno istraživanje kasnoantičkog i ranosrednjovjekovnog groblja u Novigradu (Istria)," *Obavijesti* 24, no. 1 (1992), 59–62.
- Urbańczyk, Przemysław, "Foreign leaders in early Slavic societies," in *Integration und Herrschaft. Ethnische Identitäten und soziale Organisation im Frühmittelalter*, eds. W. Pohl and M. Diesenberger, *Forschungen zur Geschichte des Mittelalters* 3 (Vienna, 2002), 257–68.
- Urbańczyk, Przemysław, "Polski węzeł Słowiański," in *Nie-Słowianie a początkach Słowian*, ed. P. Urbańczyk, *Mała biblioteka PTPN* 18 (Poznań/Warsaw, 2006), 133–53 and 172–75.
- Urtāns, Vladislavs, *Senākie depozīti Latvijā (līdz 1200. g.)* (Riga, 1977).
- Ushakov, Sergei V., "Rannevizantiiskie amfory Khersonesa: k istorii izucheniia," *Prichernomor'e. Istoriiā, politika, kul'tura* 11 (2013), 44–61.
- Ushakov, Sergei V., "Rannevizantiiskii Chersones, Pont i Vostochnoe Sredizemnomor'e (po materialam krasnolakovoi keramiki)," *MAIASK* 7 (2015), 59–70.
- Ushakov, Sergei V. and A.A. Filippenko, "Ob alanakh-khristianakh v iugo-zapadnom Krymu (po materialam raskopok mogil'nika Karshi-Bair)," in *Vzaimootnosheniia religioznykh konfessii v mnogonacional'nom regione. Sbornik nauchnykh trudov*, ed. Iu. A. Babinov (Sevastopol', 2001), 20–25 and 216–19.
- Ushakov, Sergei V. and A.A. Filippenko, "Mogil'nik Karshi-Bair v iugo-zapadnom Krymu. Pogrebal'nyi inventar' (izdeliia iz metalla)," in *Prichernomor'e, Krym, Rus' v istorii i kul'ture. Materialy II Sudakskoi mezhdunarodnoi nauchnoi konferencii (12–16 sentiabria 2004 g.)*, eds. N.M. Kukoval'skaia et al., vol. 1 (Kiev/Sudak, 2004), 115–17.
- Vaday, Andrea, "The Langobard cemetery from Ménfőcsanak," *Antaeus* 33 (2015), 163–242.
- Vaissière, Etienne de la, *Histoire des marchands sogdiens*, Bibliothèque de l'Institut des Hautes Etudes Chinoises 32 (Paris, 2002).
- Vaissière, Etienne de la, "Saint André chez les Sogdiens: aux origines de Sogdaia, en Crimée," in *La Crimée entre Byzance et le khaganat khazar*, ed. C. Zuckerman. *Monographies. Centre de recherche d'histoire et civilisation de Byzance* 25 (Paris, 2006), 171–80.
- Vaitkevičius, Vyktintas, "Interpreting the East Lithuanian barrow culture," in *Culture and Material Culture. Papers from the First Theoretical Seminar of the Baltic Archaeologists (BASE) Held at the University of Tartu, Estonia, October 17th–19th, 2003*, ed. V. Lang (Tartu/Riga/Vilnius, 2005), 71–86.
- Vaitkunskienė, Laima, "Moters ir vyro statusas žemdirbių bendruomenėje V–VI amžiais," *LTSR* 1, no. 90 (1985), 74–85.
- Vaitkunskienė, Laima, *Pagrybio kapinynas. Monografija*, Lietuvos archeologija 13 (Vilnius, 1995).



- Vaitkunskienė, Laima, "The formation of a warrior elite during the Middle Iron Age in Lithuania," *ArchB* 1 (1995), 94–106.
- Vaklinova, Margarita, "Pogrebeniia ot perioda na velikoto preselenie pri Pleven," *PPIK* 1 (1989), 129–42.
- Vaklinova, Margarita, "The Christian Rhodopes," *Rhodopica* 1 (1999), 51–72.
- Vakulenko, L.V. and Oleg M. Prykhodniuk, *Slavianskie poseleniia I tys. n. e. u s. Sokol na Srednem Dnestre* (Kiev, 1984).
- Valette, Philippe, Laurent Carozza, Cristian Micu, Jean-Michel Carozza, Aurel Stănică, and Albane Burens, "Approche géohistorique de la liaison du Lac de Babadag avec le Lac de Razim à travers l'analyse des cartes anciennes," *Peuce* 11 (2013), 343–56.
- Vámosi, Lajosné, "Dízítéstechnikai eljárások a Zamárdi avar temető VII. századi leletanyagában," *SMK* 15 (2002), 87–96.
- Vaškevičiūtė, Ilona, "Jauneikių (Joniškio raj.) V–XI a. kapinynas. 1. Laidosena. Darbo įrankiai," *LTSR*, no. 2 (1985), 48–57.
- Vaškevičiūtė, Ilona, "Jauneikių (Joniškio raj.) V–XI a. kapinynas. Ginklai," *LTSR* 2 (1986–1987), 43–51.
- Vaškevičiūtė, Ilona, "Sengallian warrior weaponry and its reflection in burial rites in the fifth to the 12th century AD," *ArchB* 8 (2007), 214–22.
- Vaskul, I.O., "Issledovaniia v basseine r. Sysoly," in *Arkheologicheskii otkrytiia 1985 goda*, ed. V.P. Shilov (Moscow, 1987), 6–7.
- Vāzharova, Zhivka, *Slaviano-bālgarskoto selishte kraī selo Popina, Silistrensko* (Sofia, 1956).
- Vāzharova, Zhivka, *Slavianski i slavianobālgarski selishta v bālgarskite zemi ot kraīa na VI–XI vek* (Sofia, 1965).
- Vāzharova, Zhivka, *Srednovekovnoto selishte s. Garvan, Silistrenski okrāg (VI–XI v.)* (Sofia, 1986).
- Veikou, Myrto, "Byzantine histories, settlement stories: kastrā, 'isles of refuge', and 'unspecified settlements' as in-between or third spaces. Preliminary remarks on aspects of Byzantine settlement in Greece," in *Oi byzantines poleis (80s–150s aionas). Prooptikes tes ereunas kai nees ermeneutikes proseggiseis*, ed. A. Kiousoupoulou (Rethymno, 2012), 159–206.
- Veikou, Myrto, "Settlements in the Greek countryside from the 4th to the 9th centuries: forms and patterns," *AT* 21 (2013), 125–33.
- Veimarn, E.V., "Arkheologichni roboti v raioni Inkermana," *APU* 13 (1963), 15–89.
- Veimarn, E.V. and Aleksandr I. Aibabin, *Skalistinskii mogil'nik* (Kiev, 1993).
- Veksler, A.G., "Raskopki gorodishch v Moskve i Podmoskov'e," in *Arkheologicheskii otkrytiia 1970 goda*, ed. B.A. Rybakov (Moscow, 1971), 90–91.
- Veljanovska, Fanica, "Skeletot od episkopskata bazilika vo Stobi," *MAA* 11 (1987), 233–39.

- Velkov, Velizar, "Les campagnes et la population rurale en Thrace au IV<sup>e</sup>-VI<sup>e</sup> siècles," *Byzantinobulgarica* 1 (1962), 31-66.
- Velkov, Velizar, "Zur Geschichte der Stadt Serdica/Sofia im 4.-9. Jhdt.," *Etudes Historiques* 3 (1965), 33-36.
- Vencl, Slavomil, "Časně slovanské osídlení v Běchovicích, o. Praha-Východ," *PA* 64, no. 2 (1973), 340-92.
- Vencl, Slavomil and Jan Zadák, "Nová časně slovanská sídliště v Praze 9-Horních Počernicích," *AR* 33 (1981), 679-87.
- Vencl, Slavomil and Jan Zadák, "Časne slovanská polozemnice z Prahy 9 - Horních Počernic," *AR* 37 (1985), 297-307.
- Vengalis, Rokas, "Old and Middle Iron Age settlements and forts," in *A Hundred Years of Archaeological Discoveries in Lithuania*, eds. G. Zabiela, Z. Baubonis, and E. Marcinkevičiūtė (Vilnius, 2016), 160-81.
- Vespremeanu-Stroe, Alfred, Luminița Preoteasa, Diana Hanganu, Anthony G. Brown, Iulian Bîrzescu, Philip Toms, and Alida Timar-Gabor, "The impact of the Late Holocene coastal changes on the rise and decay of the ancient city of Histria (southern Danube delta)," *Quaternary International* 293 (2013), 245-56.
- Vespremeanu-Stroe, Alfred, Florin Zăinescu, Luminița Preoteasa, Florin Tătui, Sabin Rotaru, Christophe Morhange, Marius Stoica, Jenică Hanganu, Alida Timar-Gabor, Ionela Cărdan, and Natalia Piotrowska, "Holocene evolution of the Danube delta: an integral reconstruction and a revised chronology," *Marine Geology* 388 (2017), 38-61.
- Viargei, Valentina S., "Poseleniia prazhskoi kul'tury Belorusskogo Poles'ia," in *Problemy slavianskoi arkheologii*, ed. V.V. Sedov, Trudy VI Mezhdunarodnogo Kongressa Slavianskoi Arkheologii 1 (Moscow, 1997), 28-38.
- Viargei, Valentina S., "Metalurgichny kompleks na ranneslavianskim paseshchy Sniadzin-2," in *Slavianskii mir Poles'ia v drevnosti i srednevekov'e. Materialy mezhdunarodnoi nauchnoi konferencii, 19-20 oktiabria 2004 g, Gomel'*, ed. A.A. Makushnikov (Hemel', 2004), 34-39.
- Viargei, Valentina S., "Prazhskaia kul'tura v Belarusi," in *Archeologia o poczqtkach Stowian. Materiały z konferencji, Kraków, 19-21 listopada 2001*, eds. P. Kaczanowski and M. Parczewski (Cracow, 2005), 487-502.
- Viargei, Valentina S., "Suchasny stan i prablemy dasledavannia prazhskai kul'tury u Belarusi," in *Slaviane na territorii Belarusi v gosudarstvennyi period. K 90-letiiu so dnia rozhdeniia doktora istoricheskikh nauk, professora Leonida Davydovicha Pabolia*, ed. A.A. Kovalenia, vol. 2 (Minsk, 2016), 14-61 and 398-99.
- Viargei, Valentina S. and Walt Tremer, "Ranneslavianskae paseshcha Petrikau-2 na r. Prypiac," *HAZ* 18 (2003), 151-87.

- Viaz'mitina, I.M., V.A. Ilins'ka, E.F. Pokrovs'ka, A.I. Terenozhkin and G.T. Kovpanenko, "Kurgany bilia s. Novo-Pylypivky i Radgospu 'Akerman," *APU* 8 (1960), 22–135.
- Viazov, Leonid A., "Sistema rasseleniia plemen imen'kovskoi kul'tury v podgornoi chasti Samarskoi luki," in *Samarskii kraj v istorii Rossii. Materialy iubilenoj nauchnoi konferencii, 6–7 fevralia 2001 g.*, ed. P.S. Kabytov (Samara, 2001), 55–69.
- Viazov, Leonid A. and D.A. Petrova, "Komarovskii mogil'nik (predvaritel'naia publikaciia)," in *Kul'tury stepi Evrazii vtoroi poloviny I tysiacheletia n. e. Materialy k V Mezhdunarodnoi archeologicheskoi konferencii*, ed. D.A. Stashenkov (Samara, 2013), 15–20.
- Viazov, Leonid A. and Iurii A. Semykin. *Gorodishche i selishche Novaia Beden'ga: epokha Velikogo pereseleniia narodov v Ul'ianovskom Predvolzh'e*, Arkheologiiia Simbirskogo-Ul'ianovskogo Povolzh'ia 1 (Ul'ianovsk, 2016).
- Viazov, Leonid A. and Dmitrii A. Stashenkov, "Kul'turno-khronologicheskie grupy naseleniia Samarskogo i Ul'ianovskogo Povolzh'ia v epokhu Velikogo pereseleniia narodov," in *Istoriko-kul'turnoe nasledie—resurs formirovaniia social'no-istoricheskoi pamiaty grazhdanskogo obshchestva (XIV Baderovskie chteniia). 14–15 oktiabria, g. Izhevsk*, eds. E.V. Goldina, N.A. Leshchinskaia, E.M. Chernykh and I.G. Shapran (Izhevsk, 2013), 49–56.
- Vida, Tivadar, *Die awarenzeitliche Keramik I. (6.–7. Jh.)*, *Varia Archaeologica Hungarica* 8 (Berlin/Budapest, 1999).
- Vida, Tivadar, "Veil pin or dress pin. Data to the question of Avar period pin-wearing," in *Pannonia and Beyond. Studies in Honour of László Barkóczi*, ed. A. Vaday, *Antaeus* 24 (Budapest, 1999), pp. 563–74 and 811–15.
- Vida, Tivadar, "Merowingische Spathagurte der Awarenzeit," *CAH* (2000), 161–75.
- Vida, Tivadar, "Reconstruction of a Germanic noble woman's costume (Kölked-Feketekapu B, grave 85)," in *Zbornik na počest Dariny Bialekovej*, ed. G. Fusek, *Archaeologia Slovaca Monographiae. Communicationes* 7 (Nitra, 2004), 435–42.
- Vida, Tivadar, "Einzel getragene germanische Scheibenfibeln im Karpatenbecken," in *Reliquiae gentium. Festschrift für Horst Wolfgang Böhme zum 65. Geburtstag*, ed. C. Dobiat, Veröffentlichung des Vorgeschichtlichen Seminars Marburg 14 (Rahden, 2005), 429–42.
- Vida, Tivadar, "Aufgaben und Perspektiven der Langobardenforschung in Ungarn nach István Bóna," in *Kulturwandel in Mitteleuropa. Langobarden—Awaren—Slawen. Akten der Internationalen Tagung in Bonn vom 25. bis 28. Februar 2008*, eds. J. Bemmman and M. Schmauder, *Kolloquien zur Vor- und Frühgeschichte* 11 (Bonn, 2008), 343–62.
- Vida, Tivadar, "Conflict and coexistence: the local population of the Carpathian Basin under Avar rule (sixth to seventh century)," in *The Other Europe in the Middle Ages*.

- Avars, Bulgars, Khazars, and Cumans*, ed. F. Curta, East Central and Eastern Europe in the Middle Ages, 450–1450 2 (Leiden/Boston, 2008), 13–46.
- Vida, Tivadar, “Die Langobarden in Pannonien,” in *Die Langobarden. Das Ende der Völkerwanderungszeit. Katalog zur Ausstellung im Rheinischen Landesmuseum Bonn*, 22.8.2008–11.1.2009, ed. M. Hegewisch (Bonn/Darmstadt, 2008), 73–89.
- Vida, Tivadar, “Bestattungen von Eliten in der Befestigung von Keszthely-Fenékpuszta im 6. und 7. Jahrhundert: Horreum und Basilika,” in *Keszthely-Fenékpuszta im Spiegel der Jahrtausende*, eds. O. Heinrich-Tamáska and P. Straub (Leipzig/Zalaegerszeg, 2009), 72–76.
- Vida, Tivadar, “Raumkonzepte der Awaren und Byzantiner und deren Auswirkungen im unteren und mittleren Donaubecken um 6.–7. Jahrhundert,” in *Parallele Raumkonzepte*, eds. S. Hansen and M. Meyer, Topoi 16 (Berlin/Boston, 2013a), 307–24.
- Vida, Tivadar, “Spätantike Buntmetallgefäße im langobardenzeitlichen Pannonien,” in *Macht des Goldes, Gold der Macht. Herrschafts- und Jenseitsrepräsentation zwischen Antike und Frühmittelalter im mittleren Donaauraum. Akten des 23. internationalen Symposiums der Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donaauraum, Tengelic, 16.–19. 11. 2011*, eds. M. Hardt and O. Heinrich-Tamáska, Forschungen zur Spätantike und Mittelalter 2 (Weinstadt, 2013b), 339–60.
- Vida, Tivadar, *Late Antique Metal Vessels in the Carpathian Basin. Luxury and Power in the Early Middle Ages*, Hereditas Archaeologica Hungariae 1 (Budapest, 2016a).
- Vida, Tivadar, “‘They asked to be settled in Pannonia ...’ A study on integration and acculturation—the case of the Avars,” in *Zwischen Byzanz und der Steppe. Archäologische und historische Studien. Festschrift für Csanád Bálint zum 70. Geburtstag*, eds. Á. Bollók, G. Csiky and T. Vida (Budapest, 2016b), 251–70.
- Vida, Tivadar, “Pannonia and the Alpine-Adriatic Region in Late Antiquity,” in *Migrazioni, clan, culture: archeologia, genetica e isotopi stabili. III incontro per l’archeologia barbarica, Milano, 18 maggio 2018*, ed. C. Giostra (Mantova, 2019), 125–38.
- Vida, Tivadar, Adrién Pásztor, and Erzsébet Fóthi, “Das Gräberfeld neben dem Horreum in der Innenbefestigung von Keszthely-Fenékpuszta,” in *Keszthely-Fenékpuszta im Kontext spätantiker Kontinuitätsforschung zwischen Noricum und Moesia*, ed. O. Heinrich-Tamáska (Budapest/Leipzig/ Keszthely/Rahden, 2011), 397–456.
- Vigil-Escalera Guirado, Alfonso, *Los primeros paisajes altomedievales en el interior de Hispania. Registros campesinos del siglo quinto d. C.* (Bilbao, 2015).
- Vigil-Escalera Guirado, Alfonso, and Juan Antonio Quirós Castillo, “Un ensayo de interpretación del registro arqueológico,” in *El poblamiento rural de época visigoda en Hispania. Arqueóloga del campesinado en el interior peninsular*, ed. J.A. Quirós Castillo, Documentos de arqueología medieval (Bilbao, 2014), 357–99.

- Vikhliaev, V.I., "Mordovskie plmena epokhi razlozheniia pervobytno-obshchinnogo stroia i ikh sosedi," in *Etnokul'turnye sviazi mordvy (dooktiabr'skii period). Mezhdvuzovskii sbornik nauchnykh trudov*, ed. N.F. Moshkin (Saransk, 1988), 11–25.
- Vilceanu, D. and Alexandru Barnea, "Ceramica lucrată cu mîna din așezarea romano-bizantină de la Piatra Frecăței (sec. VI<sup>e</sup>.n.)," *SCIVA* 26, no. 2 (1975), 209–18.
- Vinogradskii, Iu. S. and D.I. Lav'iuk, "Nakhodki bronzovykh ukrashenii v Menskom i Sosnickom raionakh," *KSIAU* 9 (1959), 96–98.
- Vinski, Zdenko, "Ein Spangenhelm aus dem östlichen Syrmien," *Germania* 32, no. 3 (1954), 176–82.
- Vinski, Zdenko, "Krstoliki nakit epohe seobe naroda u Jugoslaviji," *Vjesnik Arheološkog Muzeja u Zagrebu* 3 (1968), 103–66.
- Vinski, Zdenko, "Razmatranja o iskopavanjima u Kninu na nalazištu Greblje," *SP* 19 (1989), 5–73.
- Vionis, Athanasios K., "The Byzantine to early modern pottery from Thespiiai," in *Approaching the Ancient City. Urban Survey at Ancient Thespiiai, Boeotia, Greece*, eds. J.L. Bintliff and A.M. Snodgrass (Cambridge, 2017), 351–74.
- Vionis, Athanasios K., "Understanding settlements in Byzantine Greece: new data and approaches for Boeotia, sixth to thirteenth centuries," *DOP* 71 (2017), 127–73.
- Vishnevskii, V.I. and T.N. Novoselova, "Rannesrednevekovi finno-ugorskoj mogil'nik na Rat'kovskom gorodishche (rezul'taty raskopok 2006–2007 godov)," in *Arheologija Podmoskov'ia*, ed. A.V. Engovatova, vol. 6 (Moscow, 2010), pp. 67–82.
- Vishnevskii, V.I., N.A. Kir'ianova and M.V. Dobrovol'skaia, "Rat'kovskii rannesrednevekovi finno-ugorskii mogil'nik: khronologija, kul'tura, obriadi," *RA*, no. 2 (2007), 89–107.
- Vitliianov, Stoian, "Bronzovi modeli-matrici za kolanni ukrasi ot Preslav," *Preslav. Sbornik* 4 (1993), 166–73.
- Vlassa, Nicolae, Mircea Rusu, Dumitru Protase, and Kurt Horedt, "Săpăturile arheologice de la Iernut," *AMN* 3 (1966), 399–410.
- Vogt, Mahand, *Spangenhelme. Baldenheim und verwandte Typen*, Kataloge vor- und frühgeschichtlicher Altertümer 39 (Mainz, 2006).
- Volkman, Armin, *Siedlung, Klima, Migrationen. Geoarchäologische Forschungen zum Oderraum zwischen 700 vor und 1000 nach Chr. mit Schwerpunkt auf der Völkerwanderungszeit*, Studien zur Archäologie Europas 18 (Bonn, 2013).
- Volkman, Armin, "Region im Wandel: das 5.–6. Jahrhundert n. Chr. im inneren Barbaricum an der unteren Oder und Wartha," *Germania* 92 (2014), 133–54.
- Volkman, Armin, "Archaeological Information Systems (AIS) for digital cultural heritage management: identifying prehistoric Iron Age and early Middle Ages settlement dynamics in the Lower Oder region," in *Die frühen Slawen—von der Expansion zu gentes und nationes. Beiträge der Sektion zur slawischen Frühgeschichte des*

8. *Deutschen Archäologiekongresses in Berlin, 06.10.Oktober 2014. 1. Beiträge zum Schwerpunktthema*, eds. F. Biermann, Th. Kersting, and A. Klammt, Beiträge zur Ur- und Frühgeschichte Mitteleuropas 81.2 (Langenweissbach, 2016), 91–107.
- Volkov, Sergei R. and Igor Iu. Pastushenko, “Issledovaniia Ust’-Igrinskogo mogil’nika nevolinskoi kul’tury,” *Finno-Ugrica* 9 (2005–2006), 5–39.
- Völling, Thomas, “Ein frühbyzantinischer Hortfund aus Olympia,” *MDAI* 110 (1995), 425–59.
- Völling, Thomas, “‘Neuer Most aus alten Löwenköpfen’. Ein frühbyzantisches Gemach der alten Grabung in Olympia,” *MDAI* 111 (1996), 391–410.
- Volodarets’-Urbanovych, Iaroslav V., “Kochovnits’ki elementy z arealu pen’kivs’kykh starozhytnosti baseinu rik Suly ta Vorskly,” *Arkheologichni studii* 36 (2009), 49–52.
- Volodarets’-Urbanovych, Iaroslav V., “Do vyznachennia arealu poshyrennia goncharnoi produktsii kantsers’koi tradytsii,” in *Starozhytnosti Livoberezhnogo Podniprov’ia. Zbirnyk naukovykh prats’ i materialiv X naukovo-praktichnogo seminaru “Okhoronata doslidzhennia pam’iatok arkheologii” (m. Komsomols’k, 14–16 serpnia 2010 r.)*, ed. G.I. Fasiy (Kiev/Poltava, 2010), 60–65.
- Volodarets’-Urbanovych, Iaroslav V., “Goncharni gorny balky Kantserka,” *Arkheolohiia* (2011), 32–45.
- Volodarets’-Urbanovych, Iaroslav V., “Khronologiiia bytovaniia kancerskoi goncharnoi posudy,” in *Slaviane vostochnoi Evropy nakanune obrazovaniia drevnerusskogo gosudarstva. Materialy mezhdunarodnoi konferencii, posviashchennoi 110-letiu so dnia rozhdeniia Ivana Ivanovicha Liapushkina (1902–1968), 3–5 dekabria 2012 g., Sankt-Peterburg*, eds. O.A. Shcheglova and V.M. Goriunova (St. Petersburg, 2012), 94–96.
- Volodarets’-Urbanovych, Iaroslav V., “Vytoky ta podal’sha dolia kantsers’koi tradytsii,” *SLP* (2012), 128–39.
- Volodarets’-Urbanovych, Iaroslav V., “Metodyka doslidzhennia poshyrennia goncharnoi produktsii remisnychkykh tsentriv VII–VIII st. pivdnia skhidnoi Evropy,” *Naukovi studii*, no. 8 (2015), 277–97.
- Volodarets’-Urbanovych, Iaroslav V., “Lyvarni formochky slov’ian rann’ogo seredn’ovichchia: reinterpretatsiia znakhidok,” *ADIU*, no. 1 (2017), 331–46.
- Volodarets’-Urbanovych, Iaroslav V., “Rechi pobutovo-remisnychogo kharakteru v skladi slov’ians’kykh skarbiv kola ‘Martynivky,’” in *Interpretatsiia arkheologichnykh dzherel: zdobutky ta vykyky. Materialy naukovoii konferentsii molodykh vchenykh*, ed. A.V. Korokhina (Kiev, 2017), 91–94.
- Volodarets’-Urbanovych, Iaroslav V., “Lyvarni formochky u slov’ian epokhi rann’ogo seredn’ovichchia: dopovnennia katalogiv O.O. Shcheglovoi,” *SLP* (2018), 105–28.
- Volodarets’-Urbanovych, Iaroslav V. and Iu. V. Buinov, “Liteinye formochki s poseleniia Cirkuny 13,” *Stratum+*, no. 5 (2017), 57–86.

- Volodarets'-Urbanovych, Iaroslav V. and Andrii V. Skyba, "Goncharnyi posud VII–VIII st. na pivdni Skhidnoi Evropy," *Arkheolohiia* no. 2 (2011), 34–46.
- Vorob'ev, I.I. and P.A. Larenok, "Poberezh'e Taganroghskogo zaliva i step' v rannem srednevekov'e," in *Stepi Evropy v epokhu srednevekov'ia. 12. Khazarskoe vremia. Sbornik nauchnykh trudov*, ed. A.V. Evgelevskii (Donetsk, 2014), 153–58.
- Voroncov, A.M., "Pozdnii period sushchetstvovaniia Moshchinskoi kul'tury," *KSIIA* 235 (2014), 311–27.
- Voroncov, A.M., "Pamiatniki moshchinskoi kul'tury v tret'ei chetverty I tys. n. e.," in *Rannesrednevekovye drevnosti lesnoi zony Vostochnoi Evropy (V–VII vv.)*, eds. A.M. Oblomskii and I.V. Islanova (Moscow, 2016), 221–60.
- Vörös, István, "Aldozatiállat-maradványok a tótkomlósi avar kori sírban," *MFAMESA* 8 (2002), 345–50.
- Vörös, István, "Archeozoological investigations of the Early Avar Period cemetery at Pókaszepetk," in *Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére*, ed. T. Vida (Budapest, 2012), 679–96.
- Voznesens'ka, G.O., D.P. Nedopako, and S.V. Pan'kov, *Chorna metalurgia ta matolobrobka paselelnia skhidnoevropeiskogo lisostepu za doby slov'ian i Kyivskoi Rusi (druga polovyna I tys.-persha chvert' II tys.)* (Kiev, 1996).
- Vroom, Joanita. *Byzantine to Modern Pottery in the Aegean. An Introduction and Field Guide* (Utrecht, 2005).
- Vynokur, Ion S., "Cherniakhovskie tradicii i pamiatnikakh serediny i tret'ei chetverti I tysiacheletia n.e. lesostepnogo Dnestro-Dneprovskogo mezhdurech'ia," in *Rapports du III<sup>e</sup> Congrès international d'archéologie slave. Bratislava 7–14 septembre 1975*, ed. B. Chropovský, vol. 2 (Bratislava, 1980), 867–77.
- Vynokur, Ion S., "Persha lyvarna forma dlia pal'chastykh fibul," in *Starozhytnosti Rusi-Ukrainyi. Zbirnyk naukovykh prats'*, eds. P.P. Tolochko, Ia.E. Borovs'kyi, B.A. Zvydelets'kyi, and O.M. Prykhodniuk (Kiev, 1994), 23–27.
- Vynokur, Ion S., *Slov'ians'ki iuveliry Podnistrov'ia. Za materialamy doslidzhen' Bernashivs'kogo kompleksu seredyny I tys. n.e.* (Kam'ianets' Podil's'kyi, 1997).
- Vynokur, Ion S., "Bernashevskii iuvelirnyi kompleks i istoriko-kul'turnyi process v Evrope V–VII vv.," in *Skify, khazare, slaviane, drevniaia Rus'. Mezhdunarodnaia nauchnaia konferenciia, posviashchennaia 100-letiiu so dnia rozhdeniia professora Mikhaila Illarionovicha Artamonova. Sankt-Petersburg, 9–12 dekabria 1998 g. Tezisy dokladov*, ed. A.D. Stoliar (Sankt-Petersburg, 1998), 137–41.
- Vynokur, Ion S., "Sotsial'no-ekonomichniy rozvytok rann'oseredn'ovichnykh skhidnykh slov'ian u svitli novykh arkheologichnykh danykh," in *Istoriia Rusi-Ukrainyi. Istoryko-arkheologichnii zbirnyk*, O.P. Motsia, Ia.E. Borovs'kyi, and A.P. Tomashevskiy (Kiev, 1998), 20–26.

- Vynokur, Ion S. and P.A. Gorishnii, *Bakota. Stolytsia davn'orus'koho Ponyzzia* (Kam'ianets'-Podil's'kyi, 1994).
- Vynokur, Ion S. and V.P. Megei, "Iuvelirna maisterna rann'oseredn'ovichnikh slov'ian," *Arkheolohiia* 3, no. 2 (1992), 82–95.
- Wadyl, Sławomir, "The making of early medieval Prussia. What happened after the fall of the 'Olsztyn group,'" *Jahresbericht des Zentrums für baltische und skandinavische Archäologie* (2017), 66–67.
- Waksman, S. Yona, Iana Morozova, Sergiy M. Zelenko, and M. Çolak, "Archaeological and archaeometric investigations of the amphorae [sic] cargo of a Late Roman shipwreck sunk[en] near the Cape of Plaka (Crimea, Ukraine)," in *LRCW 4 Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry. The Mediterranean: a Market Without Frontiers*, eds. N. Poulou-Papadimitriou, E. Nodarou and V. Kilikoglou, vol. 2, BAR International Series 2616 (Oxford, 2014), 919–29.
- Walbank, Mary E. Hoskins and Michael B. Walbank, "The grave of Maria, wife of Euplous. A Christian epitaph reconsidered," *Hesperia* 75 (2006), 267–88.
- Walter, Richard, Ian Smith, and Chris Jacomb, "Sedentism, subsistence and socio-political organization in prehistoric New Zealand," *World Archaeology* 38, no. 2 (2006), 274–90.
- Ward-Perkins, Bryan, "Specialized production and exchange," in *The Cambridge Ancient History. XIV: Late Antiquity: Empire and Successors, A.D. 425–600*, eds. A. Cameron, B. Ward-Perkins, and M. Whitby (Cambridge/New York, 2000), 346–91.
- Ward-Perkins, Bryan, *The Fall of Rome and the End of Civilization* (Oxford, 2006).
- Warner Slane, Kathleen and Guy D.R. Sanders, "Corinth: late Roman horizons," *Hesperia* 74 (2005), 243–97.
- Weiner, Annette, *Inalienable Possessions. The Paradox of Keeping-While-Giving* (Berkeley, 1992).
- Welbourn, D.A., "Craft specialization and complex societies: a critique," in *Settlement and Society: Aspects of West European Prehistory in the First Millenium B.C.*, eds. T.C. Champion and J.V.S. Megaw (New York, 1985), 123–31.
- Werner, Joachim, "Archäologische Zeugnisse für merowingischen Handel in Ostpreussen," *Germania* 17 (1933), 277–82.
- Werner, Joachim, "Slawische Bügelfibeln des 7. Jahrhunderts," in *Reinecke Festschrift zum 75. Geburtstag von Paul Reinecke am 25. September 1947*, ed. G. Behrens (Mainz, 1950), 150–72.
- Werner, Joachim, "Fernhandel und Naturalwirtschaft im östlichen Merowingerreich nach archäologischen und numismatischen Zeugnissen," *BRGK* 52 (1961), 307–46.



- Werner, Joachim, *Die Langobarden in Pannonien. Beiträge zur Kenntnis der langobardischen Bodenfunde vor 568*, Abhandlungen der Bayerischen Akademie der Wissenschaften. Philosophisch-historische Klasse 55A (Munich, 1962).
- Werner, Joachim, "Zur Verbreitung frühgeschichtlicher Metallarbeiten (Werkstatt-Wanderhandwerk-Handel- Familienverbindung)," *Antikvariskt arkiv* 38 (1970), 65–81.
- Werner, Joachim, *Der Grabfund von Malaja Pereščepina und Kuvrat, Kagan der Bulgaren*, Abhandlungen der Bayerischen Akademie der Wissenschaften, Philosophisch-historische Klasse 91 (Munich, 1984).
- Werner, Joachim, "Zu den Bügelfibeln aus den völkerwanderungszeitlichen Brandgräberfeldern Masuriens," *Germania* 62, no. 1 (1984), 74–77.
- Werner, Joachim, "Kagan Kuvrat, fondatore della Magna Bulgaria. La sua tomba a Malaja Pereščepina presso Poltava," *Archeologia medievale* 12 (1985), 709–12.
- Werner, Joachim, "Golemanovo Kale und Sadovsko Kale: Kritische Zusammenfassung der Grabungsergebnisse," in *Die spätantiken Befestigungen von Sadovec (Bulgarien). Ergebnisse der deutsch-bulgarisch-österreichischen Ausgrabungen 1934–1937*, ed. S. Uenze, Münchner Beiträge zur Vor- und Frühgeschichte 43 (Munich, 1992), 391–417.
- Werner, Joachim, "Neues zu Kuvrat und Malaja Pereščepina," *Germania* 10, no. 2 (1992), 430–36.
- Whitaker, Adrian R., Jelmer W. Eerkens, Amy M. Spurling, Edward L. Smith, and Michelle A. Gras, "Linguistic boundaries as barriers to exchange," *JAS* 35 (2008), 1104–13.
- Whitby, Michael, *The Emperor Maurice and His Historian: Theophylact Simocatta on Persian and Balkan Warfare* (Oxford, 1988).
- Whitby, Michael, "The Balkans and Greece 420–602," in *The Cambridge Ancient History. XIV: Late Antiquity: Empire and Successors, A.D. 425–600*, eds. A. Cameron, B. Ward-Perkins, and M. Whitby (Cambridge/New York, 2000), 701–30.
- White, Lynn, *Transformation of the Roman World. Gibbon's Problem after Two Centuries* (Berkeley/Los Angeles, 1966).
- Whittow, Mark, "Ruling the late Roman and early Byzantine city: a continuous history," *Past & Present* 129 (1990), 3–29.
- Wickham, Chris, "The uniqueness of the East," *Journal of Peasant Studies* 12 (1985), 166–96.
- Wickham, Chris, "Overview: production, distribution, and demand," in *The Sixth Century. Production, Distribution, and Demand*, eds. R. Hodges and W. Bowden, *The Transformation of the Roman World* 3 (Leiden/Boston, 1998), 279–92.
- Wickham, Chris, *Framing the Early Middle Ages. Europe and the Mediterranean, 400–800* (Oxford/New York, 2006).

- Wickham, Chris, *The Inheritance of Rome. A History of Europe from 400 to 1000* (New York, 2009).
- Wickham, Chris, "Conclusion," in *The Languages of Gift in the Early Middle Ages*, eds. W. Davies and P. Fouracre (Cambridge, 2010), 238–61.
- Wielowiejski, Jerzy, "Bernsteinstrasse und Bernsteinweg während der römischen Kaiserzeit im Lichte der neueren Forschung," *Münstersche Beiträge zur antiken Handelsgeschichte* 3/2 (1984), 69–87.
- Wielowiejski, Jerzy, "Depositi dell'ambra sul territorio tra la parte media del Danubio e il mar Baltico dal I secolo a.C. al V secolo d. C.," *ArchPol* 25–26 (1987), 75–84.
- Wiewiorowski, Jacek, "Quaestor Iustinianus exercitus i jego kompetencje je wobec wojska," in *Współczesna romanistyka prawnicza w Polsce*, eds. A. Dębiński and M. Wójcik (Lublin, 2004), 301–22.
- Wiewiorowski, Jacek, "Quaestor Iustinianus Exercitus—a late military commander?" *Eos* 93, no. 2 (2006), 317–40.
- Williams, Charles K. II, Jean Macintosh and Joan E. Fisher, "Excavation at Corinth, 1973," *Hesperia* 43, no. 1 (1974), 1–76.
- Wimmer, L.F.A., "A bezenyei rúnás fibulák," *AE* 14 (1894), 21–23.
- Winter, Heinz, "Die Buntmetallbearbeitung bei den Awaren," in *Reitervölker aus dem Osten. Hunnen + Awaren. Burgenländische Landesausstellung 1996. Schloß Halbturn, 26. April–31. Oktober 1996*, eds. F. Daim, K. Kaus, and P. Tomka (Eisenstadt, 1996), 355–58.
- Winter, Heinz, "Die byzantinischen und karolingischen Fundmünzen aus dem österreichischen Bereich der Avaria—eine Neubearbeitung," in *Byzantine Coins in Central Europe Between the 5th and 10th Century. Proceedings from the Conference Organized by the Polish Academy of Arts and Sciences and the Institute of Archaeology of the University of Rzeszów under the Patronage of Union Académique Internationale (Programme No. 57 Moravia Magna), Kraków, 23–26 IV 2007*, ed. M. Wołoszyn, Moravia Magna, Seria Polona 3 (Cracow, 2009), 325–56.
- Wolf, Eric R., "Closed corporate peasant communities in Mesoamerica and Central Java," *Southwestern Journal of Anthropology* 13 (1957), 1–18.
- Wolf, Eric R., *Peasants* (Englewood Cliffs, 1966).
- Wolf, Mária, "Das slawische Gräberfeld von Zemplénagárd," in *Ethnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis zum 11. Jahrhundert. Symposium Nitra 6. bis 10. November 1994*, eds. D. Bialeková and J. Zábajník (Bratislava, 1996), 51–62.
- Wolff, Hartmut, "Vermutungen Zum Ende Antiker Lebensformen Im Südöstlichen Alpenraum," in *Slovenia in sosednje med dežele antiko in karolinško dobo. Začetki slovenske etnogeneze*, ed. P. Kos (Ljubljana, 2000), 27–40.
- Wolff, Larry, *Inventing Eastern Europe. The Map of Civilization on the Mind of the Enlightenment* (Stanford, 1994).

- Wolińska, Teresa, "Konflikt wokół obsady biskupstwa Salony (593–599). Sukces czy porażka papieża Grzegorza I Wielkiego?" in *Byzantina Europaea. Księga jubileuszowa ofiarowana Profesorowi Waldemarowi Ceranowi*, eds. M. Kokoszko and M.J. Leszka, *Byzantina Lodziensia* 11 (Łódź, 2007), 561–72.
- Wołoszyn, Marcin, "Moneta bizantyńska na terenie kaganatu awarskiego (uwagi na marginesie książki Pétera Somogyi 1997)," *APol* 44 (1999), 147–77.
- Wołoszyn, Marcin, "Monety bizantyńskie z VI–VII w. w Polsce na tle środkowoeuropejskim," in *Archeologia o początkach Słowian. Materiały z konferencji, Kraków, 19–21 listopada 2001*, eds. P. Kaczanowski and M. Parczewski (Cracow, 2005), 637–80.
- Wołoszyn, Marcin, "Byzantine coins from the 6th and 7th century from Poland and their East-Central European context. Ways and phases, contexts and functions," in *Roman Coins Outside the Empire. Ways and Phases, Contexts and Functions. Proceedings of the ESF/SCH Exploratory Workshop, Radziwiłł Palace, Nieborów (Poland), 3–6 September 2005*, eds. A. Bursche, R. Ciołek, and R. Wolters, *Collection Moneta* 82 (Wetteren, 2008), 195–224.
- Wołoszyn, Marcin, "Byzantinische Münzen aus dem 6.–7. Jh. in Polen," in *Byzantine Coins in Central Europe Between the 5th and 10th Century. Proceedings from the Conference Organized by the Polish Academy of Arts and Sciences and the Institute of Archaeology of the University of Rzeszów under the Patronage of Union Académique International (Programme No. 57 Moravia Magna), Kraków, 23–26 IV 2007*, ed. M. Wołoszyn, *Moravia Magna, Seria Polona* 3 (Cracow, 2009), 473–530.
- Wołoszyn, Marcin, *Theophylaktos Simokates und die Slawen am Ende des westlichen Ozeans—die erste Erwähnung der Ostseeslawen?* (Cracow, 2014).
- Wołoszyn, Marcin, "Slawen von der Ostsee beim byzantinischen Kaiser Maurikios um 595? Zur Glaubwürdigkeit der Überlieferung bei Theophylaktos Simokates, *Historiae* VI.2," in *Die frühen Slawen—von der Expansion zu gentes und nationes. Beiträge der Sektion zur slawischen Frühgeschichte des 8. Deutschen Archäologiekongresses in Berlin, 06.10. Oktober 2014. 1. Beiträge zum Schwerpunktthema*, eds. F. Biermann, Th. Kersting and A. Klammt, *Beiträge zur Ur- und Frühgeschichte Mitteleuropas* 81.2 (Langenweissbach, 2016), 61–73.
- Wood, Ian, "Report: The European Science's Foundation's Programme on the Transformation of the Roman World and Emergence of Early Medieval Europe," *Early Medieval Europe* 6, no. 2 (1997), 217–227.
- Yannopoulos, Panagiotis A., "Les Slaves chez Ménandre," *Epetiris Hetaireias Byzantinon Spoudon* 48 (1990–1993), 27–35.
- Żabiński, Grzegorz and Janusz Stępiński, *Technology of Sword Blades from the La Tène Period to the Early Modern Age. The Case of What is Now Poland* (Oxford, 2014).

- Zábojník, Jozef, "Zum Vorkommen der Reitergräber auf Gräberfeldern aus der Zeit des awarischen Kaganats," in *Ethnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis zum 11. Jahrhundert. Symposium Nitra 6. bis 10. November 1994*, eds. D. Bialeková and J. Zábojník (Bratislava, 1996), 179–94.
- Zábojník, Jozef, Vladimír Mitáš, and Ján Štubňa, "Krištáľový mnohosten z Čataja. K problematike nálezov z horského krištálu v archeologických súvislostiach zo Slovenska a na susediacich územiach," *SlovArch* 65, no. 2 (2017), 343–76.
- Zachariadis, Stavros, "Pottery from the workshop building, in the early Byzantine city of Philippi, Greece," in *LRCW 4 Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry. The Mediterranean: a Market Without Frontiers*, eds. N. Poulou-Papadimitriou, E. Nodarou, and V. Kilikoglu, vol. 2, BAR International Series 2616 (Oxford, 2014), 705–13.
- Zaharia, Eugenia, "Rolul istoric al obștilor sătești. Contribuție la cunoașterea istoriei românilor în mileniul I. Închinarea țărănimii române," *Acta Moldaviae Meridionalis* 2 (1980), 133–56.
- Zaharia, Eugenia, "La station no. 2 de Bratei, dép. de Sibiu (VI<sup>e</sup>–VIII<sup>e</sup> siècle)," *Dacia* 38–39 (1994–1995), 297–356.
- Zahra, Tara, *The Great Departure. Mass Migration from Eastern Europe and the Making of the Free World* (New York, 2016).
- Zaiac, Iurii A., "Raskopki v okrestnostiakh Zaslavlja," in *Arkheologicheskie otkrytiia 1979 goda*, ed. B.A. Rybakov (Moscow, 1980), 362.
- Žak, Jan, "Brakteaty z Wapna (pow. Wągrówiec) na tle porównawczym," *PArch* 9 (1953), 80–116.
- Žak, Jan, "O kontinuačji i dyskontinuačji społecznej i kulturowej na ziemiach nadodrzańskich i nadwiślańskich w V–V/VI w. n. e.," *FPF* 1 (1984), 85–108.
- Zaleskaia, Vera N., Zlata A. L'vova, and Boris I. Marshak, "Pereshchepinskoe sokrovishche," in *Sokrovishcha Khana Kubrata*, ed. O. Fedoseenko (St. Petersburg, 1997), 21–23.
- Zapolska, Anna, "The solidus of Heraclius from Wargen in Sambia—reconsidered," *Notae numismaticae* 12 (2018), 167–86.
- Zaseckaia, Irina P., *Kul'tura kochevnikov iuzhnorusskikh stepei v gunnskuuiu epokhu (konec IV–V vv.)* (St. Petersburg, 1994).
- Zaseckaia, Irina P., "Datirovka i proiskhozhdenie pal'chatykh fibul bosporskogo nekropolia rannesrednevekovogo perioda," *MAIET* 6 (1997), 394–478.
- Zaseckaia, Irina P., "Bosporskii nekropol' kak etalonnii pamiatnik drevnostei IV–nachala VII veka," in *Krym, Severo-Vostochnoe Prichernomor'e i Zakavkaz'e v epokhu srednevekov'ia, IV–XIII veka*, eds. T.I. Makarova and S.A. Pletneva (Moscow, 2003), 31–40.

- Zaseckaia, Irina P., "Mikhael'sfel'd—etalonnyi pamiatnik rannego srednevekov'ia (k voprosu o datirovke i etnokul'turnoi prinadlezhnosti)," *ASGE* 38 (2010), 123–59.
- Zaseckaia, Irina P., Michel Kazanski, Iliia R. Akhmedov, and R.S. Minasian, *Morskoi Chulek. Pogrebeniia znati iz Priazov'ia i ikh mesto v istorii plemen Severnogo Prichernomor'ia v postgunnskogo epokhu* (St. Petersburg, 2007).
- Zastěrová, Bohumila, "Avaři a Slované," *Vznik a počátky Slovanů* 2 (1958), 19–54.
- Zastěrová, Bohumila, *Les Avars et les Slaves dans la Tactique de Maurice*, Rozpravy Českoslovenké Akademie věd. Rady společenských věd 81 (Prague, 1971).
- Zavadskaia, Irina A., "Khristianskie raspisnye sklepy Kryma v kontekste razvitiia pogrebal'noi raspisi v rannevizantiiskii period," *MAIET* 15 (2009), 89–131.
- Zav'ialov, Vladimir I., "Tekhniko-tekhnologicheskie kharakteristiki zheleznykh predmetov iz Mladshego Akhmylovskogo mogil'nika," in *Srednevekovye drevnosti Volgo-Kam'ia*, eds. G.A. Arkhipov and V.V. Nikitin (Ioshkar-Ola, 1992), 165–84.
- Zeleneev, Iu. A. and V.N. Shitov, "O planirovke Starokadomskogo mogil'nika," in *Arkheologicheskie pamiatniki mordvy I tysiacheletia n. e.*, ed. G.A. Fedorov-Davydov, Trudy Nauchno-issledovatel'skogo instituta iazyka, literatury, istorii i ekonomiki pri Sovete Ministrov Mordovskoi ASR 63 (Saransk, 1979), 134–39.
- Zerbini, Andrea, "The late antique economy: regional surveys," in *Local Economies? Production and Exchange of Inland Regions in Late Antiquity*, ed. L. Lavan, *Late Antique Archaeology* 10 (Leiden/Boston, 2013), 41–58.
- Zhdakov, Zarko, "Za trite zlatni prăstena s monogrami na kan Kubrat," *Palaeobulgarica* 29, no. 4 (2006), 84–94.
- Zhiganov, M.F., "Starshii Kuzhendeevskii mogil'nik v doline r. Tessa," *SA*, no. 1 (1959), 218–27.
- Zhikh, Maksim I., "Rannie slaviane v srednem Povolzh'e: svedeniia pis'mennykh istochnikov i vozmozhnosti ikh sopostavleniia s dannymi arkeologii," in *Polikul'turnyi mir srednego Povolzh'ia: social'no-antropologicheskie i istoricheskie aspekty*, ed. A.N. Ovchinnikov, vol. 1 (Kazan', 2014), 41–67.
- Zhikh, Maksim I., "Slavianskaia znat' dogosudarstvennoi epokhi po dannym nachal'nogo letopisaniia," *Istoricheskii format*, no. 2 (2015), 7–28.
- Zhilina, Nataliia V., "Slaviano-russkii ubor iz ukrasheniia kak obăekt istorii prikladnogo iskusstva (VI–IX vv.)," in *Balkan, Podunavlje i Istochna Evropa u rimsko doba i u ranom srednjem veku Materijali I srpsko-ruske arkeoloshke konferencije "Sudbine naroda Istochne i Juzhne Evrope—pogled kroz vekove"* (20–26. maja 2014 g. Novi Sad, Beograd), eds. I.O. Gavritukhin and S. Trifunović (Novi Sad, 2019), 443–75.
- Zhuravlev, O.P., "Zhivotnovodstvo i okhota na ranneslavianskom poselenii Semenki," *Stratum+*, no. 5 (2005–2009), 632–39.
- Zhuravlev, O.P., "Osteologichni materialy z rann'oslov'ians'kogo poselennia Obukhiv 2," *In Sclavenia terra* 1 (2016), 172–206.

- Ziemann, Daniel, *Von Wandervolk zur Großmacht. Die Entstehung Bulgariens im frühen Mittelalter (7.–9. Jh.)*, Kölner historische Abhandlungen 43 (Cologne/Weimar/Vienna, 2007).
- Ziemann, Daniel, “Zwischen Geschichte und Mythos—Großbulgarien unter Khan Kubrat,” *Bulgaria Mediaevalis* 1 (2010), 17–49.
- Zin’ko, A.V., “Bosporskii gorod Tiritaka v rannevizantiiskuiu epokhu (po materialam raskopok 2002–2005 gg.),” in *Vizantiia v kontekste mirovoi kul’tury. K 100-letiiu so dnia rozhdeniia Alisy Vladimirovny Bank, 1906–1984. Materialy konferencii*, eds. V.N. Zaleskaia et al., *Trudy Gosudarstvennogo Ermitazha* 42 (St. Petersburg, 2008), 329–37 and 591–92.
- Zin’ko, A.V. and V.N. Zin’ko, “Voprosy topografii goroda Bospora v rannevizantiiskoe vremia,” in *Vizantiia v kontekste mirovoi kul’tury. Materialy konferencii, posviashchennoi pamiati Alisy Vladimirovny Bank, 1906–1984*, eds. V.N. Zaleskaia et al., *Trudy Gosudarstvennogo Ermitazha* 89 (St. Petersburg, 2017), 164–76.
- Zirra, Vlad and Gheorghe Cazimir, “Unele rezultate ale săpăturilor arheologice de pe Cîmpul lui Boja din cartierul Militari,” *CAB* 1 (1963), 56–71.
- Živić, Maja, “Early Byzantine metallurgical object at the site Gamzigrad-Romuliana in Eastern Serbia,” *Journal of Mining and Metallurgy* 45, no. 2 (2009), 197–206.
- Živković, Tibor, *Forging Unity. The South Slavs Between East and West: 550–1150* (Belgrade, 2008).
- Żołędziowski, Karol, “Techniki produkcji biżuterii ze stopów miedzi na cmentarzysku grupy olsztyńskiej w Kosewie st. 2 (Kossewen III),” in *Kosewo. Archiwalne cmentarzysko z okresu wędrówek ludów Kossewen III. Badania w roku 2014*, ed. A. Jaremek (Warsaw, 2015), 49–58.
- Zotović, Ljubica, “Die gepidische Nekropole bei Viminacium,” *Starinar* 43–44 (1992), 183–90.
- Zubar’, V.I., “Novye materialy k datirovke rannekhristsianskoi rospisi nekropolia Khersonesa,” in *Surozh, Sugdeia, Soldaia v istorii i kul’ture Rusi-Ukrainy. Materialy nauchnoi konferencii (16–22 sentiabria 2002 g.)*, eds. N.M. Kukoval’skaia et al. (Kiev/Sudak, 2002), 105–08.
- Zubar’, V.M., “Sklepy z khrystyans’kym rozpyssom nekropolia Khersonesa: problemi datuvannia,” *Arkheolohiia*, no. 2 (2009), 18–23.
- Zubar’, V.M. and Renate Pillinger, “New tombs with early Christian murals from the necropolis of Tauric Chersonesus (preliminary note),” *Talanta* 32–33 (2000–2001), 123–30.
- Žulkus, Vladas, and Mindaugas Bertašius, “Handelsplätze zwischen Danziger und Rigaer Bucht zur Zeit Wulfstans,” in *Wulfstan’s Voyage. The Baltic Sea Region in the Early Viking Age as Seen from Shipboard*, eds. A. Englert and A. Trakadas (Roskilde, 2009), 198–204.

- Zvelebil, Marek, "Hunting in farming societies: the prehistoric perspective," *Anthropozoologica* 16 (1992), 7–18.
- Zverugo, Ia. G., *Belaruskae Paville u zhaleznyim veku i rannim siaredneviakoui*, *Materyialy pa arkhealogii Belarusi* 10 (Minsk, 2005).
- Zverugo, Ia. G. and A.M. Medvedev, "Selishche Mikolcy (materialy issledovaniia 1986–1991 godov)," in *Arkhealogiia epokhi siaredneviakouia (da 75-goddzhia z dnia nara-dzhennnia P.F. Lysenki)*, ed. S.P. Vitsiaz (Minsk, 2006), 33–55.
- Żychliński, Daniel and Tomasz Goslar, "Daty radiowęglowe z wielkopolskich osad ludności kultury przeworskiej z okresu wędrówek ludów," in *Labor et patientia. Studia archaeologica Stanislaw Pazda dedicate*, ed. A. Błażejowski (Wrocław, 2008), 333–43.

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